

DEEP MANEUVER: PAST LESSONS IDENTIFIED
FOR FUTURE BOLD COMMANDERS

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
Military History

by

Ronnie L. Coutts, MAJ, British Army

Fort Leavenworth, Kansas
2003

Approved for public release; distribution is unlimited.

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major Ronnie L. Coutts

Thesis Title: Deep Maneuver: Past Lessons Identified for Future Bold Commanders

Approved by:

_____, Thesis Committee Chairman
LTC Versalle F. Washington, Ph.D.

_____, Member
LTC Franklin Moreno, M.A.

Accepted this 6th day of June 2003 by:

_____, Director, Graduate Degree Programs
Philip J. Brookes, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

DEEP MANEUVER: PAST LESSONS IDENTIFIED FOR FUTURE BOLD COMMANDERS, by MAJ Ronnie L. Coutts, 106 pages.

Future war concepts envisage dispersed formations roaming deep into enemy territory to achieve a disproportionate effect on their enemy. The effect they seek to achieve is not simply attritional, but the shattering of an enemy's cohesion. Many of the great captains of war have achieved these effects, but their lessons for deep maneuver have been lost amidst the other details of their campaigns. A study is therefore needed across history if one is to identify the enduring lessons, solely relating to deep maneuver: that is the aim of this thesis. Four classic deep maneuver periods are therefore used to identify these lessons: Napoleon in 1805 and 1806 and 1812, the *Werhmacht* in 1939-1941, the Israeli Defense Force in 1967 and 1973, and the Gulf War of 1990 and 1991. Deep maneuver is an expansive subject therefore, to focus research this study concentrates on solely conventional forces. Other supporting factors such as airpower or fires are commented upon where they assist in identifying lessons learned. Based on the analysis of four different deep maneuver experiences this study concludes that deep maneuver is not the panacea for all ills, but is a tactic that future commander's must comprehend. Fourteen principles for deep maneuver are identified.

ACKNOWLEDGMENTS

I enjoyed the tremendous support and guidance of several people in writing this thesis, in particular my committee of Lieutenant Colonel Versalle Washington and Lieutenant Colonel Franklin Moreno. Lieutenant Colonel Washington provided me with a historian's eye for analysis and the flowing prose to explain often-complex events in history. Lieutenant Colonel Moreno, whom I would also qualify as a historian, was from the outset my "tactics man" who identified the true value of my research for future commanders. Both also admirably translated the uniquely British phrases I managed to inject. The inspiration for this thesis comes strangely, not from a person or previous study, but from a British Army formation that I had the joy to serve with: 16 Air Assault Brigade. A formation that lives in the deep area of the battlefield and it was my experiences with them that inspired me to examine this subject in greater depth. Lastly, and most importantly, Lizzie, Harry, and Imogen, my family, have become, to their chagrin, deep maneuver *experts* and put up with Pa hiding himself in the library for far too long. I truly value their support and understanding.

TABLE OF CONTENTS

	Page
THESIS APPROVAL PAGE	ii
ABSTRACT	iii
ACKNOWLEDGMENTS	iv
LIST OF ILLUSTRATIONS	vi
LIST OF TABLE.....	vii
CHAPTERS	
1. INTRODUCTION	1
2. NAPOLEON	16
3. GERMAN EXPERIENCES: WORLD WAR II.....	34
4. ISRAELI EXPERIENCE: THE APOGEE OF BLITZKREIG.....	55
5. THE 1990 AND 1991 GULF WAR.....	75
6. CONCLUSION AND PRINCIPLES	86
BIBLIOGRAPHY	94
INITIAL DISTRIBUTION LIST.....	97
CARL CERTIFICATION FORM	98

LIST OF ILLUSTRATIONS

Figure	Page
1. Turning Movement.....	3
2. Napoleon: Ulm Campaign of 1805: Strategic Deep Maneuver	19
3. Napoleon: <i>Bataillon Carree</i>	21
4. Napoleon: Russian Campaign Situation, 24 July 1812.....	25
5. Napoleon: Graphical Depiction of the Strength of the <i>Grande Armee</i> 1812.....	28
6. German Campaign in Poland: Deep Maneuver to Encircle Polish forces.....	36
7. General Heinz Guderian Commanding XIX Corps in Poland.....	38
8. General Eric Von Manstein 1940.....	41
9. German Campaign in Western Europe 1940.....	42
10. Schematic Operation Barbarosa Plan, 1941.....	46
11. Israel and Immediate Neighbors.....	56
12. Brigadier Tal and Colonel Conen in the Formers Command Vehicle.....	58
13. The Breakthrough of Tal's Ugda at Rafa El- Arish, 5-6 June 1967.....	60
14. General Ariel Sharon, 1973.....	66
15. Outline of Operation Gazelle, 18-23 October 1973.....	67
16. Operation Desert Saber - "The One Hundred Hours War.".....	76
17. Kuwait Theatre of Operation	77

LIST OF TABLE

Table	Page
1. Principles for Deep Maneuver.....	92

CHAPTER 1

INTRODUCTION

Throughout the ages, political leaders and field commanders alike have sought the secret to achieving a quick, decisive, and economic victory (in terms of casualties or materiel) over their foes. Few have enjoyed the luxury or had the desire to seek the destruction of their enemies purely by attrition. Consequently, they have striven to either engineer or pluck from chance the decisive stroke, which unhinges an enemy army and brings about its defeat or collapse. Many have seen deep maneuver as the solution to this quandary, but few commanders are masters of the art of deep maneuver. By its very nature the employment of such an audacious tactic calls for a boldness and certainty of action surely only borne from lengthy study balanced by genuine combat experience. Brigadier W. R. Rollo CBE, a former British armored brigade commander, who commanded 4th Armored Brigade on the initial entry into Kosovo, summed up the deep maneuver quandary thus, “I feel we’ve rather lost our nerve to conduct deep maneuver.”¹ In the predicted operational environment of the next twenty years, regaining nerve, boldness, and certainty of action will be decisive if future commanders are to achieve the “first mission success” now expected of them.

Scope of Thesis

Ask any group of army officers from any army what “deep maneuver” means to them and for as many officers that one asks one will receive as many different replies. It is therefore important to define the scope of this thesis. For the purposes of research deep maneuver is defined as:

Decisive employment of combined arms forces into the enemy rear to achieve a disproportionate effect in order to shatter an enemy's will and cohesion and bring about his rapid defeat without decisively engaging his main forces or becoming involved in an attritional battle.²

Why such a narrow focus? This thesis seeks to reevaluate and reemphasize an area that is presently lacking in doctrine and study. Deep maneuver is not the panacea for all ills, but rather is another club in the golf bag of tactics to be employed. Conventional forces are the chosen focus of this thesis in an effort to draw lessons that can be applied to the bulk of forces in the future. Such a choice will, by necessity, cover indirect fires from the air and ground, but will not review them in isolation, rather as they complement the maneuver forces' action.

This thesis therefore seeks to distil from campaigns and actions across the ages the critical components of successful deep maneuver by conventional forces and to reemphasize their uses against the backdrop of the future operating environment.

Why Deep Maneuver Is Important

Before conducting a pointless examination of the past, it is crucial to ask oneself if there is a need to ponder a question on deep maneuver when so much has been written on the subject and its value. The answer is a resolute "yes" when one attempts to place into context the use of future armed forces fighting in a noncontiguous battlefield and the deficit in present doctrine over the use of deep maneuver to achieve decisive results, at every level. Surprisingly, there is no definition in current US doctrine on deep maneuver as a distinct tactic. The best offering from US Army Field Manual 3-0, *Operations* is that of a turning movement as shown (see fig.1):

A *turning movement* is a form of maneuver in which the attacking force seeks to avoid the enemy's principal defensive positions by seizing objectives to the enemy rear and causing the enemy to move out of his positions or divert forces to meet the threat. A threat to his rear forces the enemy to attack or withdraw rearward, thus "turning" him out of his positions.³

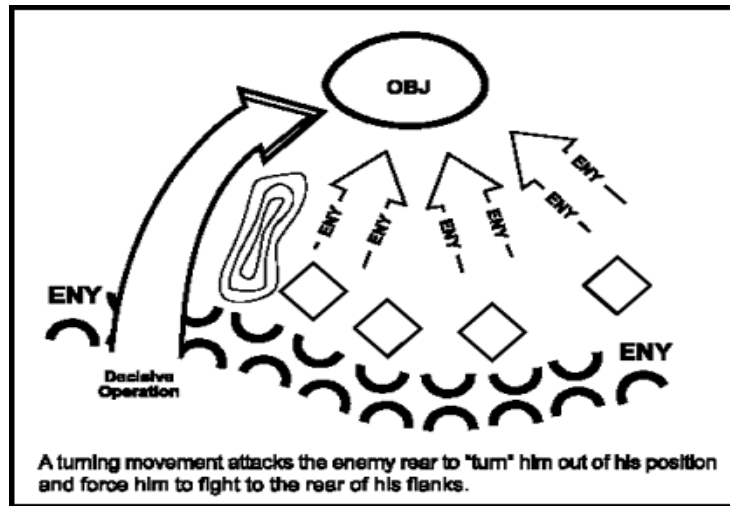


Fig. 1. Turning Movement. Reprinted from US Department of the Army Field Manual 3-0, *Operations* (Washington D.C: US Department of the Army, July 2001), 7-12.

The maneuverist approach,⁴ the doctrine, places great emphasis on the shattering of an enemy's will instead of his physical annihilation. United States Brigadier General Huba Wass de Czege, surmised this clash of wills as, "war is first and foremost a contest of wills and the enemy quits not because of what has already happened, but because of what he believes might happen if he doesn't."⁵ He goes on to say that "the enemy is more likely to quit when attacked in more than one dimension."⁶ Deep maneuver expands the dimensions forces attack in and expands the effect on an enemy's willpower, cohesion, and unity.

Deep maneuver at the tactical level is often presently classified as the nightly, cyclical deep strike (not arguably maneuver for there is no enduring effect other than attrition) by swarms of attack helicopters or precision fires to wear an enemy force down to an acceptable force ratio. Sadly, Operation Desert Storm merely reinforced the belief in this attritional idea and did little to bring the art and science of deep maneuver forward. In the hype surrounding this, historically recent, operation it is difficult to sometimes see the reality of an already demoralized enemy destroyed by stupendously superior technology in ostensibly a close fight conducted by VII Corps. Such a derisory statement does not underestimate the efforts of the coalition formed in 1990 and 1991, but highlights the need for this thesis by examining deep maneuver through the ages to identify the enduring principles.

Applicability to the Future

The future, as most military theorists predict, sees forces linked by a common operating picture ranging across the battlefield to strike separate objectives. Such a scenario may already have been in action late in 2001 when allied forces tracked and destroyed Al Qaeda and Taliban fighters in Afghanistan. More recently Operation Iraqi Freedom in 2003 is, at the time of writing ongoing, but contains many examples of deep maneuver. The lessons for future deep maneuver are, however, hard to draw from such near history and this thesis will therefore draw upon examples that have had the opportunity to mature. Present day conventional commanders, despite success on recent operations, remain hampered by a lack of training, with supporting doctrine to fight the deep battle when this battle means a rapid penetration of enemy defenses emphasizing

speed and violence into an enemy rear area, perhaps by avoiding battle early on with the aim of shattering cohesion and tearing apart an enemy center of gravity. The scenario of a twenty-first century formation fighting with no flanking forces, no rear area and limited or difficult resupply is glibly talked of in every description of the “contemporary operating environment,” but not reinforced in either the doctrine or the tactics, techniques and procedures of current forces. Present and future forces must be able to conduct “nonlinear” and “noncontiguous” operations to the operational depth of an enemy if they are to succeed in this environment and by studying the masters of such action through the ages can they increase their comfort and competence in this area. That is why an examination of deep maneuver is important.

Research Question

Based on the perceived doctrinal and requisite tactical knowledge gaps and to ensure focus this thesis examines:

“What are the enduring tenets or principles that emerge from deep maneuver from Napoleon to the Gulf War of 1990 and 1991?”

Historical Overview

To provide the necessary collateral to convey a credible argument it is prudent to draw lessons from a wide span of history to show its enduring qualities. Such exposure also arguably demonstrates that deep maneuver is not the product of new technology at any given moment in history. “Technological advantage alone rarely has been decisive in war. Instead, the most impressive victories more often than not have been achieved by

forces using technology equally available to both sides, but employed by the winner in effective methods and combinations.”⁷ This thesis has concentrated upon a *window* of history covering the period from Napoleon to the Gulf War of 1990 and 1991. There are clearly many deep maneuver examples to be drawn from antiquity, but by moving forward from Napoleon the essential elements of a modern Army and comparable technology are in evidence including the employment of artillery, rifled weapons, cavalry in the guise of both armor and scouts, combined arms and the genesis of mission orders to subordinates. A modern focus, by bringing the argument up to the end of the twentieth century, lends relevance and shows the current and possible future use of comparable weapons systems. In examining the history of deep maneuver, it pays one to find the masters of this operation and to draw upon their experiences and thought processes that allowed them to achieve a disproportionate effect to size of the forces they employed. It is for that reason that the names of Napoleon Bonaparte, Heinz Guderian, Ariel Sharon, and Norman Schwarzkopf will echo in concert with lesser-known figures, such as Barry McCaffrey and Israel Tal.

Napoleon Bonaparte

Napoleon Bonaparte immediately emerges as a “master” of the art of deep maneuver who by harnessing the advantages of a patriotic and revolutionary army and his undoubted military genius was able to achieve a series of outstanding victories, which brought nearly all of western Europe under his control.

The campaigns of 1805 and 1806, where he is arguably at his zenith and the lessons are self-evident, are focused upon for they highlight immediate lessons for deep

maneuver. In 1805 Napoleon, faced by threats from Italy, Austria, Britain, and Russia, left sufficient forces on the Channel and in Italy and struck out on a deep campaign to defeat quickly the Austrians before the Russians engaged, while shielding other areas. His army was by now well trained, commanded mostly by combat veterans and imbued with patriotic vigor. A vigor, which when focused by Napoleon's vision, allowed him to conduct the bold maneuvers to defeat the Austrians at Ulm on 21 October 1805 and the Austro-Russian forces at Austerlitz on 2 December 1805. By a combination of rapid cross country movement of up to twenty-five miles in a day, striking at lines of communications and advancing on several axis he achieved outstanding successes. Carl von Clausewitz codified such action as, "march separately, strike together."⁸ These deep maneuvers often with a depleted and logistically weakened army, as at Austerlitz, outmatched and outfought his foes who could not cope with the speed and depth of his attacks.

How did Napoleon engineer such a devastatingly effective concept in comparison to his enemies of the day? The fervor and self-interest of his soldiers ensured loyalty and dedication amongst the lowest ranks and contrasts sharply with the dynastic armies initially facing him. It also initiates a theme that armies who have successfully executed deep maneuver have generally, but not exclusively, been offensively minded, confident in their leadership and willing to take risks: criteria that are worthy of note. Logistically his baggage trains had been reduced by his ability to live off the land and his trust in his subordinates. "They could be trusted to disperse, forage and return to their Regiments. Dynastic troops were generally not allowed to disperse and forage because often they did not return. This meant Napoleon could always move faster than his enemies."⁹ There is

clearly an element of risk in such a strategy, but it is interesting to note that German Panzer General Heinz Guderian, who will be discussed later, also took the view, albeit to a lesser extent, that in his bold moves he would achieve some succor from living off the land. In Guderian's case the "land" meant overrun depots and fuel points in France and Russia nearly a century and a half later.

Much of Napoleon's success had little to do with luck in identifying weak points. His use of cavalry as a screen both to find the enemy, but just as importantly to block enemy reconnaissance was decisive and allowed him to strike with maximum effect. That his army was configured in combined arms corps and a *bataillon carree* formation under capable leaders, such as Davout, Soult, and Murat enabled his formations to react quickly without regrouping as intelligence gathered by his cavalry flowed in. This tactical balance and intelligence dominance allowed French forces to strike with maximum effort at an enemy weakness.

At his height, Napoleon developed a deep maneuver strategy that has clear lessons for the future. His strategy of bold, decisive leadership, reconnaissance blinding of the enemy, whilst he worked for information and combined arms formations able to react aggressively to a developing situation have enduring characteristics.

Conversely Napoleon's defeat in Russia in 1812 is a campaign of "what ifs" whereby the campaign could so nearly have gone in French favor. That it did not holds valuable lessons for a deep maneuver commander. His tardy execution, failure to understand the hardness of his adversary and an inhibiting command style over his subordinates engendered failure for Napoleon. Russian competence and the arrival of "General Winter" complete the culling of nearly half a million men.

Napoleon is therefore a logical start point in any contemporary examination of deep maneuver for we see him combine the attributes and technical competence of a great deep maneuver commander with aplomb in 1805 and 1806 that contrasts starkly with his failures in 1812. The lessons from both campaigns are equally valid.

German Deep Maneuver in World War II

You hit somebody with your fist and not with your fingers spread.¹⁰

Generaloberst Heinz Wilhelm Guderian

Napoleon in his time epitomized the value of deep maneuver and his methods were similarly not lost upon Heinz Guderian who brings this thesis into the twentieth century. Guderian's harnessing of the triad of tank, radio, and airpower to create the Blitzkrieg unleashed in 1939 on Poland, but more importantly in 1940 on France and the Low Countries showed deep maneuver at its best. The battle for France in 1940 is "not one of material superiority, but of doctrine"¹¹ and it is this aspect of skill versus size that shows the true impact of deep maneuver. German forces had used the "laboratory" of the Spanish Civil War to perfect their uses of new technology, albeit in much smaller scale actions than those about to follow. The crucial outcome was, however, that the lessons identified by General Gamelin and his French General Staff, were that war had essentially remained the same, while the Germans read that change was set to flow. Guderian had already in 1937 published *Achtung! Panzer*, which by its very publication confirmed the maturity of German armored tactics and technological capabilities, but is more remarkable for "the direct line of descent which Guderian traces between the almost successful German tactics of infiltration of 1918 and the Blitzkrieg he foresaw."¹² To

validate Blitzkrieg it is important to remind oneself of the aspirations of Great War tactics. “At Verdun, on the Somme or elsewhere the attempt to break through involved attacks by infantry, other arms acting in support, over widely extending fronts. It was wide pressure aiming at occupying slices of ground.”¹³ Blitzkrieg conversely, by capitalizing on the abilities of its new Panzer formations, sought to find weak points and to achieve local superiority, often in areas as little as ten to twelve miles across. *Schwerpunkt*, as a tactical definition, implies finding and exploiting weak spots. When applied at every level by moving from weak point to weak point the German formations were able “to maintain surprise, initiative and superiority even in the smallest details of the fight.”¹⁴ On the face of it, however, many see Blitzkrieg as the application of violence in depth by armored and air forces operating in unison across a broad front. The reality is an agile force avoiding decisive engagement constantly moving towards a common goal in depth and most importantly rendering enemy forces irrelevant. The geographical focus and concentration of the action is tight, but the effects shatter an entire front.

The overall effect on the French General Staff Headquarters is telling and highlighted the psychological effect of decisive deep maneuver. On 15 May 1940 the intent in an order issued by General Gamelin, subsequently captured by German forces was “the torrent of German tanks must be stopped.”¹⁵ Such language only serves to highlight French desperation, but above all the shattering of their cohesion. The accompanying detail in the order was already forty-eight hours out of date and rendered irrelevant. German commanders knew that their victories were due to a number of factors such as beheading of enemy commands, ruthless determination to win, tactics

synergizing new technologies and understanding the art of deep maneuver by paying little attention to the fears of superiors concerned over flanks and consolidation.

Israeli Operations

The six full-scale Arab-Israeli wars since the conception of Israel as a state highlight the evolving and modern development of Israeli deep maneuver to counter its unique geographic and political circumstances. No strategic depth, limited manpower to draw upon and a need to finish conflicts quickly to minimize economic effects has by default forced the Israeli Defense Force (IDF) to adopt a preemptive and aggressive military strategy. The concept from Jerusalem of “transferring to Arab territory the greatest possible extent of fighting and either demobilizing or unleashing the IDF in short order reflect their lack of time as a luxury in a crisis.”¹⁶ The IDF was until the late 1980s the true keepers of Blitzkrieg and brought the tenets identified and employed by Guderian and Rommel, so brutally in World War II, forward in a logical and augmenting manner.

Israeli operations in 1967 and 1973 offer clear lessons for the deep maneuver commander. General Israel Tal’s decisive action to achieve a break through into the Sinai on the night of 5 and morning of 6 June 1967 enabled the subsequent deep maneuver that made the Six Day War so remarkable. Tal’s, plus the overall Israeli, understanding of chaos as a phenomenon ensured that in a frenetic battle, sight of the objective or aim was never lost amidst the mire. This ability to work within chaos and even to capitalize upon its effect is critical; for the deep maneuver commander will almost certainly operate within such an environment. General Ariel Sharon’s actions in October 1973 acutely

highlight the often contradicting command style best suited to deep maneuver, that of risky, bold and daring moves, versus making the impossible possible.

These aspects of the break through battle, chaos and command style make the Israeli experiences invaluable to the deep maneuver commander. Also by, “understanding Israeli territorial, economic, manpower, diplomatic and qualitative versus quantitative considerations” one can see why they “favor this kind of warfare.”¹⁷ Indeed, these effects have allowed it to employ these tactics based on diplomatic necessity when other nations would be *forced* to adopt a more conservative approach. Strike early, hit deep, employ joint fires, and cultivate better-trained and better-motivated armed forces than your enemy is a trend that flows from Napoleon to Guderian to Sharon.

Gulf War of 1990 and 1991

The Gulf War of 1990 and 1991 offers a dangerous precedent upon which to draw lessons for deep maneuver. Poor Iraqi tactics and absolute technology over match made, with the benefit of hindsight, a predictably one-sided conflict. The lessons are, however, there to be drawn, but must be done so with careful balance.

Focusing on airpower, a continuing theme from the *Wehrmacht* of World War II and the Israeli experiences, the 1990 and 1991 Gulf War showed that it is not solely its destructive capabilities that make it inherently useful to a deep maneuver commander. In the Gulf War its ability to create the conditions for deep maneuver by shattering cohesion, providing highly mobile firepower to fast moving formations, and in blinding the Iraqis made it critical to the deep maneuver plan. Its lack of true integration in 1990

and 1991, however, beyond being a “scene setter” is just as telling a lesson for the future.

Air should be viewed as an integral maneuver element, not an adjunct.

Logistically, modern armed forces use phenomenal amounts of fuel alone.

General Barry McCaffrey, Commander 24th Infantry Division, as he crossed into Iraq in February 1991 carried a staggering 1.2 million gallons of fuel in his division. With advances in vehicle technology enabling true cross-country rapidity by armored formations, logistical drag has now equally negated these advances resulting in a speed equilibrium that still only matches the fastest advances of World War II.

McCaffrey offered a modern insight into deep maneuver command style where, by urging on his formation he capitalized on pure speed as a force multiplier. Not as simple as the physics formula of $F = MV^2$ it nonetheless is an enduring facet to deep maneuver.

Conclusion and Introduction to Deep Maneuver Principles

This thesis has focused on a specific tactical operation, that of deep maneuver, amongst an infinite variety of possibilities in war. It has done so given a gap in both our doctrine and training that pays scant regard to this operation. Unashamedly it has sought to distill enduring principles, if only to develop a useful product for the future, and has chosen classic examples to draw upon. In researching deep maneuver from Napoleon to the Gulf War of 1990 and 1991 the following “principles” have emerged: Style (Commander), Style (Subordinates), Logistics, Speed, Effect on Enemy, Consideration for Civilians and Enemy, Risk Management, Set Conditions, Consider Limitations,

Chaos, Combined and Joint at Every Level, Air, Firepower, Separate and Mutually Supporting Routes.

Whether advancing across the vast Russian steppe in 1812 or 1941, battling onto the Sinai in 1967 or shattering Iraqi formations in 1991 these principles can be applied to all deep maneuver campaigns and will become evident in subsequent chapters.

¹Brigadier WR Rollo CBE (late RHG/D), interview by author at British Army Staff Conference, notes, Washington DC, 27 September 2002.

²Author's definition for clarity.

³Department of the Army FM 3-0, *Operations* (Washington DC: US Department of the Army, July 2001), 7-12.

⁴"An approach to operations in which shattering the enemy's overall cohesion and will to fight is paramount." Taken from: British Army Publication, *Design for Military Operations. The British Military Doctrine* (London: Ministry of Defense, 1996), 4-21.

⁵Brigadier General Huba Wass de Czege, *Towards a Future Army* (Leavenworth, KS: September 2002), 13.

⁶*Ibid.*, 13.

⁷*Ibid.*, 8.

⁸F.O. Miksche, *Attack: A Study of Blitzkrieg Tactics* (New York: Random House, 1942), 12.

⁹Thomas M. Huber writing in: C600 "Evolution of Modern Warfare" student text - *French Revolution and Introduction to Napoleon* (Leavenworth, KS: US Army Command and General Staff Officer Course, July 2002), 134.

¹⁰Source: <http://www.achtungpanzer.com/gen2.htm>.

¹¹Miksche, 4.

¹²John Keegan writing in: *Illustrated History of the Violent Century – Guderian* (New York: Ballantine Books, 1973), 54.

¹³Miksche, 18.

¹⁴Ibid., 16.

¹⁵Heinz Guderian, *Panzer Leader* (New York: Ballantine Books, 1957), 86.

¹⁶David Rodman. "Israel's National Security Doctrine: An Introductory Overview." *Middle East Review of International Affairs*, Sep 2001, 2.

¹⁷Ibid., 4.

CHAPTER 2

NAPOLEON

I have destroyed the enemy merely by marching.¹

Napoleon Bonaparte, 1805

Napoleon Bonaparte. His very name speaks to those mildly aware of his exploits of dash, audacity and a style of warfare culminating in deep and spectacular attacks. He is therefore a natural commander to focus upon in any analysis of deep maneuver. Many have sought to “crack the code” on his exploits, including the great theorist Antoine Henri Jomini. Jomini, so in awe of Napoleon, as were most military and political men of his day, stated, “one might say that he [Napoleon] was sent into this world to teach generals and statesmen what they ought to avoid. His victories teach what may be accomplished by activity, boldness and skill; his disasters what might have been avoided by prudence.”² This chapter, heeding Jomini’s words, will examine Napoleon and his use of deep maneuver at its apogee in the Ulm-Austerlitz and Jena-Auerstadt campaigns of 1805 and 1806 and conversely in the tragic over-reach of the Russian campaign of 1812. Napoleon’s impact on warfare, since he fought his way onto the world stage, has been profound not only for the revolution in military affairs he engendered from the seeds of the French Revolution, but also from the sheer number of campaigns he participated in or led. Starting in July 1793 with the siege of Toulon and ending in Waterloo on 14 June 1815, he fought every army in Europe, and was overwhelmingly successful. He is also a logical start point for any contemporary thesis on deep maneuver, not only for his prolific use of such maneuver, some would argue his trademark, but also the components of his armies are still to be found in any modern army and comparison is therefore easier.³

Napoleon: The Man

A chapter singularly focused on one great captain must briefly describe the intellect and character of Napoleon if one is to understand some of the motivations behind his decisions. The examination of command style will also continue in future chapters, for as will be seen; the successful deep maneuver commander constantly strives to balance the desire for bold, often risky maneuver, with an eye for the possible. All too often he is required to make the impossible possible. Starting with Napoleon, a theme of boldness combined with an analytical mind are the traits that emerge as those best nurtured by the deep maneuver commander. Napoleon at his zenith combined both with élan. His effect on campaigns is such that Wellington equated his presence on the battlefield to “equal 40,000 troops.”⁴ Such an effect is gained not only by a superb military mind, but also by Napoleon’s ability to rouse his men in their desire for the illusory *la gloire*.⁵

Born in 1769 into minor Corsican nobility, Napoleon led a difficult twenty years prior to the French Revolution as his family contested with never ending money problems. At ten he was admitted to the Brienne military school and then progressed to the *Ecole Militaire* in Paris, departing a year early following the death of his father and a further decline in family fortunes. Commissioned as an artillery officer he showed early on his aptitude for geometry and the scientific aspects of warfare while studying at the Artillery School in Valence. As an individual Napoleon, as much because of a lack of funds as a lack of sociability, immersed himself in books at the store of Monsieur Aurel in Valence where he vociferously read history and political studies.⁶ This study was a trait he continued throughout his life.

Napoleon managed to ride the events of the French Revolution by skill, luck, and the benevolence of a highly placed Paul Barras with whom he shared the affections and more of Josephine Beauharnais.⁷ Attaining the rank of major general at twenty-six years old, Napoleon's rise had been meteoric and despite his earlier isolated studiousness he had developed a personality and command style that capitalized on his subordinates' Gallic élan, wit and indiscipline. His experience to date had been in "The Paris Cauldron" and at Toulon and Marseilles fighting the British. These when combined with his studies, had made him a great commander about to make his mark on the world.

Ulm-Austerlitz

By August 1805 Napoleon appreciated the rising threat to his borders posed by the Third Coalition of Britain, Austria, Russia, Naples, and Sweden and turned the *Grande Armée D'Angleterre*, concentrated near the Channel coast, to the east.⁸ The Austrians had entered Bavaria, assembling at Ulm under General Mack an army of 50,000 who anticipated a timely linkup with the lumbering Russians before facing battle with Napoleon. Drawing the Austrians west by a series of feints and obscuring his movements with a cavalry screen Napoleon urged his seven Corps, moving on separate routes, to move at thirty kilometers per day (fig. 2) into a position to the rear of Mack. Engineers had moved ahead to scout German roads and rapidly arranged alliances smoothed the passage of the now named *Grande Armée*. Outnumbered, and with their lines of communication now cut the Austrians lost 20,000 men in a series of brisk actions. Mack realized that decisive combat was futile, he had been efficiently encircled, and surrendered on twenty-first of October 1805 with 27,000 men under arms.

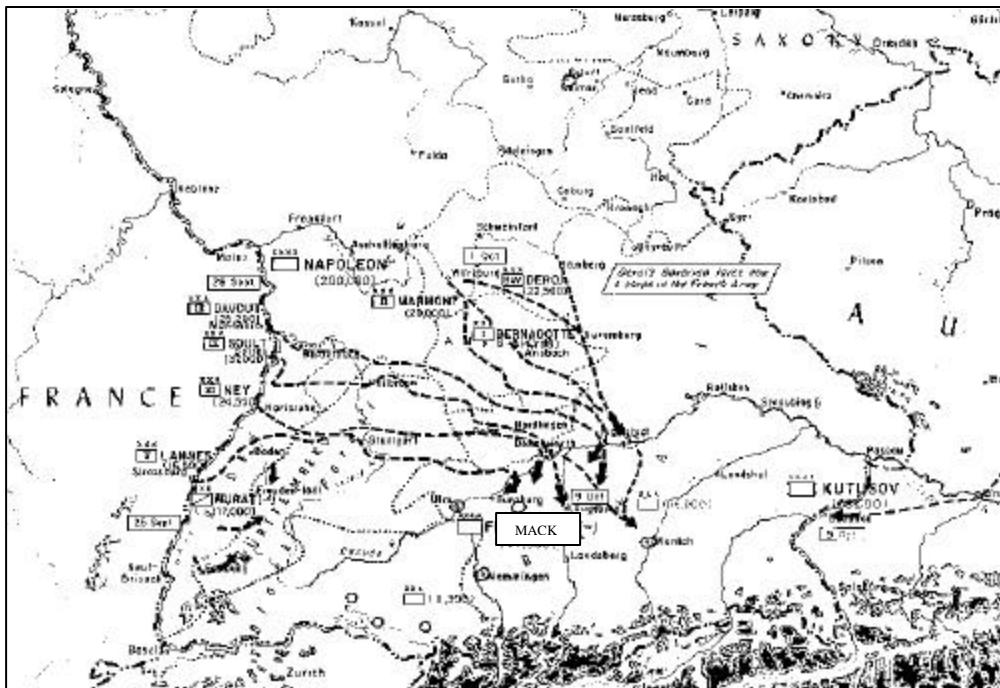


Fig. 2. Ulm Campaign 1805: Strategic Deep Maneuver. Reprinted from West Point Military History Series, *Atlas for the Wars of Napoleon* (New Jersey: Avery Publishing Group Inc, 1986), 16.

Napoleon then moved his tired and exhausted army to Austerlitz and the area of the decisive Pratzen Heights feigning that his forces were weak and depleted (the truth being not far from reality), whilst accepting an allied (Austro-Russian) armistice offer. Withdrawing off the heights Napoleon drew the allied forces off balance effectively drawing them into his right flank. He then smashed against the allied center and feeding in corps as they arrived from the march pivoted into the allied rear, causing 27,000 casualties and sending the Austrians reeling. This subsequent battle at Austerlitz fought on 2 December 1805, offers much in terms deception in war and tactical supremacy, but is not deep maneuver. It serves, however, as the start point for the Jena-Auerstadt campaign of 1806.

Jena- Auerstadt

Quartered in Southern Germany, the *Grande Armee* consisted of experienced troops with only the Prussians as immediate adversaries on continental Europe. A link up with Russian forces by the Prussians would, in the medium term, generate a far greater force than the 180,000 available to Napoleon. An irresolute Prussian High Command decided to concentrate forces around Erfurt and threaten Napoleons left flank, while awaiting the Russians. Napoleon, not of the demeanor to wait such a fate, ordered a rapid advance towards Berlin through the Thuringian Forest. He intended to cut the Prussian lines of communication, outflank their forces and imperil Prussian bases and their capital.⁹ Uncertain as to the exact location of the Prussians, but aware that they were on the move, he formed his *Grande Armee* into a *bataillon carree* formation (fig. 3) allowing it to react to engagement from any side, all corps being within a days' march of one another. On 8 October 1806 the *Grande Armee*, preceded by a cavalry screen, began moving. Pairs of corps moved along three separate routes and quickly passed through the Thuringian Forest where they met only sporadic opposition. Caught off balance the Prussians immediately gave up their offensive and sought to protect their communications. Having received vague reports of Prussian forces Napoleon swung his army west anticipating a decisive battle at Jena. On 14 October battle was joined, not the decisive battle Napoleon envisaged, but a double engagement against Prussian forces now focused solely on their escape, not battle. One Corps began the engagement and capitalizing on their *bataillon carree* formation a total of four Corps numbering 96,000 men ultimately were fed in to crush the Prussians inflicting 25,000 casualties for the

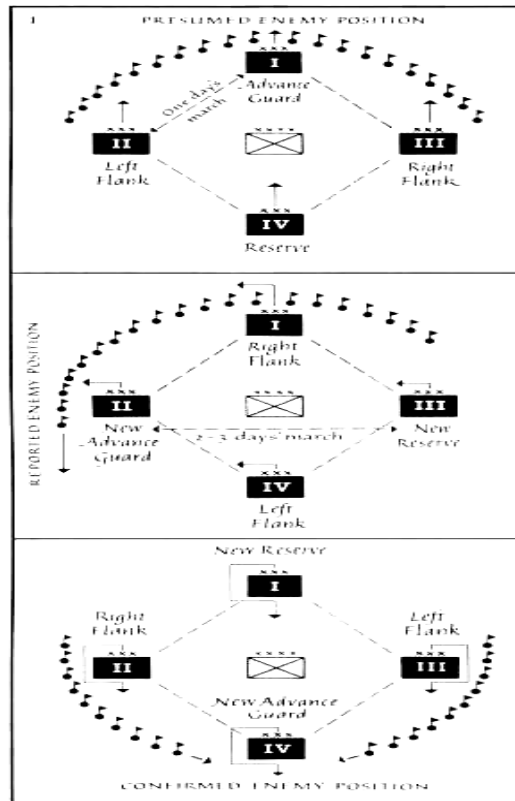


Fig. 3. *Bataillon Carree*. Reprinted from David Chandler, *The Campaigns of Napoleon: The Mind and Method of History's Greatest Soldier*. (New York: MacMillan Publishing Company, 1966), 152.

loss of 5,000 Frenchmen. At Auerstadt a single French Corps of 27,000 men devastated the Prussian main force, twice their size, scattering them into a full retreat after inflicting 10,000 casualties and capturing 115 guns.

Summary of Ulm-Austerlitz and Jena-Auerstadt

The campaigns of 1805 and 1806 see Napoleon at his pinnacle. His rapid movement, flexible formations and deep attacks successively unhinged his opponents and allowed him to defeat them in detail. His deep maneuver is made possible by sureness in command borne from an almost mathematical approach to time, space and movement of formations. Not a precise science, for the “friction of war”¹⁰ was well known to him, he did, however, understand the need for a mode of movement permitting battle to be joined whenever the enemy main body is located. The *bataillon carree* solved this problem and also allowed his formations to forage on separate routes: a new concept for the armies of the day. Napoleon’s deep maneuver brought about at best (from the French perspective) paralysis of enemy command, as at Ulm, and as second best molding of enemy intent, as was seen by Prussian diversion from their aims at Jena-Auerstadt. Not only was Napoleon able to dictate the tempo of operations, but also the place of battle. If battle was to be joined the effect of deep maneuver was to minimize the bloody close battle and turn a normally resolute Prussian army into one thinking solely of flight, not fight.

Russia 1812

I do not possess such generals as you, nor am I myself a leader like Napoleon.¹¹

Tsar Alexander I

A telling comment from a pragmatic leader of Russia, it was, however, Alexander’s stubbornness and the hardness of his troops, coupled to the vast steppes of Russia, which when exploited by his commanders that brought about their success in 1812. These factors when combined with Napoleon’s ego culminated in a campaign that

culled nearly half a million soldiers of the *Grand Armee*. In many ways the 1812 Russian campaign is a story of “what ifs” where time and time again Napoleon could have succeeded in a deep maneuver of grand proportions. Similarly, the Russians in stumbling upon their fighting withdrawal, partly for sheer survival and partly as military expedient, so nearly lose the campaign until helped by “General Winter”¹² and French lethargy. This brief examination of the 1812 Russian campaign therefore seeks to draw out Napoleon’s failures, but also reasons for the successful Russian evasion of Napoleon’s deep maneuver.

By 1812 most of Europe had submitted to Napoleon and had to a greater or lesser extent adopted his Continental System.¹³ Spain had degenerated into vicious guerilla warfare after Napoleon replaced the Spanish King Charles IV with his brother Joseph, but on the whole Europe was calm. Russia, however, continued to trouble Napoleon. The French naval losses at Aboukir Bay in 1798 and Trafalgar in 1805 had firstly prevented any overland expedition to India to negate British power and secondly made an amphibious invasion of the British Isles militarily impossible. Napoleon’s Continental System was therefore seen as a means of strangling the British economy into submission. On 7 July 1807, at Tilsit, Tsar Alexander I and Napoleon agreed to partition their respective spheres of influence and Alexander agreed to join Napoleon’s commercial war on Britain. The treaty was, at best a gesture of friendship, but in reality a chance for both sides to exploit more time for their own ends. By 1812 relations, despite continuous emissaries, had broken down to a stage where war was inevitable. Alexander had all but abandoned the Continental System and Napoleon, who viewed war and diplomacy as being one and the same action, had in place an army of over half a million men. On 24

June 1812 as Napoleon crossed the Niemen River (fig. 4) and sought to “lunge” at the Russian First Army, cutting their lines of communication, he anticipated a quick and decisive blow to fall and the road to Moscow to be open to him in relatively short order. His *Grande Armée* consisted of one-third French, the remainder Dutch, Westphalian, Polish, Bavarian, Saxon, Prussian, Austrian, Croatian, Dalmatian, Swiss, Italian and, even Spanish, numbering a total of 614,000 men.¹⁴ The vast distances and the limited foraging possibilities had not escaped Napoleon as reflected in the size of his force, but also in the twenty-six logistical battalions he formed for the campaign. This army was not, however, the same army seen at its zenith in 1806. Simple attrition had removed many of the old guard, its size made it less maneuverable, the logistical train was an unusual encumbrance for Napoleon and he felt the need for tighter control of his subordinates. Its sheer size, however, gave it a quality all of its own and although this constricted its bulk to the predictable line of Vilna-Smolensk-Moscow, to Russian commanders it was an unstoppable behemoth. Facing Napoleon on the main line of advance was the Russian First Army commanded by General Barclay de Tolly. An uninspiring, dour man he nonetheless possessed a fine military mind and a resoluteness of character. To the south General Bagration, Second Army commander, contrasted as an enigmatic leader who knew his Russians and was said to, “exert a magnetic influence over them, but lacked, unfortunately, the higher military education needed of such a leader.”¹⁵ The Russian armies, separated and outnumbered, had no choice but to go against their natural combative character and to withdraw into the Russian interior. It is interesting to note that a fierce debate had raged within the Russian court in the months leading to war.



Fig. 4. Russian Campaign Situation 24 July 1812. Reprinted from West Point Military History Series, *Atlas for the Wars of Napoleon* (New Jersey: Avery Publishing Group Inc, 1986), 16.

This was a court infected with French *émigrés* and Prussian advisors who competed for the malleable mind of the Tsar, often in contest with his commanders. One Prussian, Phull, had become *persona grata*¹⁶ with the Tsar and advocated an immediate withdrawal to the Dwina River where a massive defensive fortification was to destroy Napoleons army. Phull had failed to understand that Napoleon's success was not solely based on tactical supremacy, but also on strategic and operational maneuver that would soon envelop such a position. Barclay de Tolly as war minister and senior field commander molded this idea and understood that a Fighting withdrawal, wearing down the *Grande Armée* was his only option, other than facing an early decisive defeat. He therefore ordered his forces to continue with rearguard actions, but to fall back and to await the link up between himself and Bagration before any offensive could be contemplated. On the 26 July Napoleon, having been frustrated by the Russian eastward

moves, rode up to his advanced guards near Vitebsk and seeing the stubborn action ensuing decided that here the Russians had turned to Fight. “The Russian camp, which was plainly visible in the distance, confirmed him in this idea. Campfires were seen burning all that night, and the Emperor prepared for the coming struggle. When morning dawned, however, not a single hostile soldier was to be seen”¹⁷

At Smolensk on 17 August a furious action took place with Napoleon seeking to grapple with the now joined Russian armies.¹⁸ Only Barclays “intestinal fortitude”¹⁹ in the face of anger, frustration and insult by his fellow commanders, who wanted to stand and fight, extracted the Russians at the cost of six thousand Russian and nine thousand French dead.²⁰ The reality of this Napoleonic urban warfare was horrific, “The suburbs of Smolensk presented a gruesome sight, death having thrown together friend and foe with impartial finality. Inside the city, entire blocks had been turned into ashes, containing the carbonized remains of the wounded who had been unable to flee the flames.”²¹ This continuous withdrawal had ridden against the Russian soldiers’ natural tenacity and love of the offense, in short wearing his morale dangerously low. Tsar Alexander understood this dynamic and also the effect on the Russian peoples. He consequently replaced Barclay as senior Russian commander with General Mikhail Golenischev-Kutusov a, “corpulent, one-eyed, native-born veteran, sixty-seven years old who after twenty years campaigning was both cunning and tenacious.”²² Barclay, far from being a failure (he continued to command 1st Army) had worn down Napoleon psychologically with his refusal to give battle and reduced the numbers of the French commanded force without being decisively defeated. He handed over to Kutusov a coherent and still resolute army, not one that so easily could have been ravaged by a rout. He also reminded Kutusov of

the Tsar's words to him, "Do not forget I have no other Army, and keep this uppermost in your mind."²³

Initial Failure of Deep Maneuver: 1812 Russia

Before looking at the Battle of Borodino, fought after Napoleon's fateful decision to press on from Smolensk to Moscow, it is worth examining the reasons for the failures of Napoleons deep maneuvers against the Russians up to the battle of Smolensk. Firstly the Russian plan enacted by Barclay and Bagration, admittedly one of survival, had the second order effect of frustrating Napoleon's maneuvers. "He [Napoleon] wished above all else to avoid isolated action, his one intention being to bring about a decisive battle. The Russians, on the other hand, were continually retreating, thus paralyzing his plans."²⁴

If Mack's stagnation at Ulm had ensured French success, then Russian movements ensured the *Grand Armee* could not grasp this fleeting foe. Napoleon's command style and the tardiness of his subordinates had also engendered a lack of initiative. Davout, at the time commanding the southern flank of the main body, around the 25 July knew that, "by crossing the Dnieper he could molest Bagration's retreat, but he feared to act contrary to Napoleon's orders."²⁵ In many instances "the handling of the troops by Jerome, Eugene and even Murat, was lifeless and half-hearted. Many valuable opportunities were missed, which reacted most perniciously on subsequent events."²⁶ Such a command style could not survive the distances of Russia, where few lateral routes existed and communication by dispatch rider was, at best, tenuous. As an example of how not to command a deep operation it is telling, for with the freedom and drive to succeed coupled to greater energy the jaws could have been snapped on Bagration and Barclay early in the campaign. It also serves as a useful insight into another dynamic of deep

maneuver, that of relative speed. One factor constantly on the Russian side was their ability to extract themselves before being decisively engaged and defeated. Napoleon's moves up to Smolensk remain bold, in proportion with previous campaigns, but because the Russians can react with the same and sometimes quicker speed they have less effect. Speed is therefore relative. In deep maneuver any attacking force must be able to move and react faster than the opposing force otherwise its effect is blunted and it risks defeat. As Napoleon's deep maneuvers into the Russian interior continued his forces dwindled and scope for deep maneuver was lost due lack of numbers to both fix the enemy and then to attack into their rear. As the graph (fig. 5) shows the size of his maneuver force changes from a saber to a knife and then to little more than a needle once at the burning Kremlin. The Bear has parried the early saber thrust, survived a knife wound at Borodino and brushed aside the needle in Moscow with crushing results in the end.

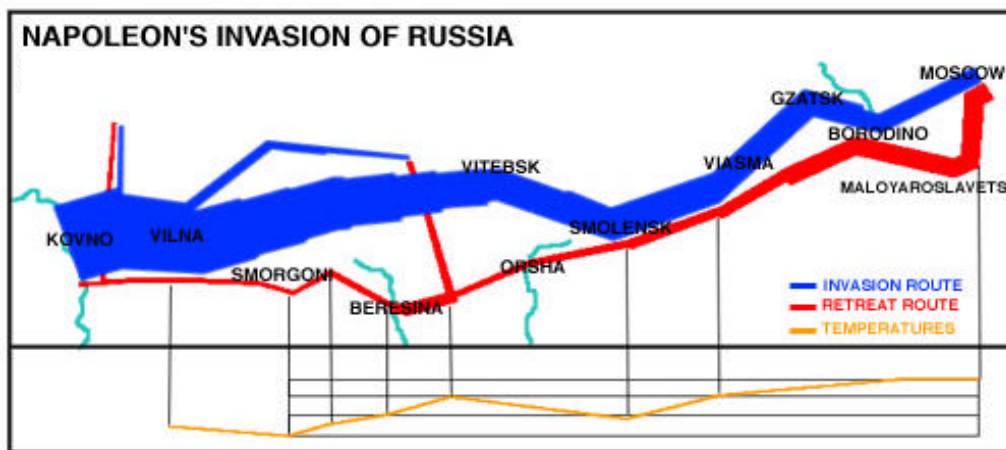


Fig. 5. There may be “lies, damn, lies and statistics,” but this graphical depiction of the strength of the *Grande Armée* succinctly illustrates the dwindling combat power at Napoleons disposal. Data from Major Paul Webber US Army, CGSOC student.

Russian Character

The subsequent battles at Borodino, Moscow and the retreat of the *Grand Armée* are not considered in further detail as examples of deep maneuver. The conduct and spirit of the Russian troops at Borodino is, however, worthy of mention. Their courage, tenacity and sheer doggedness has been alluded to above, but at Borodino we see graphically their will power against the French. Kutusov selected Borodino as much for its defensive qualities as for the need to turn his Russians to Fight. The decision to torch their capital had yet to be made and Napoleon himself viewed the battle as at “the gates of Moscow.”²⁷ What followed was not so much an attritional battle as one of annihilation that in its eight-hour duration accounts for 70,000 dead. Dr David Chandler equated this to, “imagine that every five minutes for a total of eight hours a fully laden 747 jumbo jet smashes into the ground. There are no survivors.”²⁸ On the eve of battle Davout spoke with Napoleon offering to move overnight with a force of 40,000 to envelop the Russians.²⁹ Napoleon refused on account of not wishing to allow the Russians to yet again escape a decisive battle. As successive French formations break themselves against the Grand Redoubt itself, “belching out a veritable hell”³⁰ the Russians remain firm and despite crushing penetrations of their lines resolutely withdraw back to the next ridgeline and regroup, in a “grudging recoil.”³¹ Such penetrations have in previous campaigns been the triggers for rout and defeat of previous enemies, but now have little additional effect. The difference confounded the French, who in applying their old combined arms formula expect the same results. There is a key difference. The Russians have adopted themselves French tactics, they are steeled by the knowledge that they are fighting for the defense of Mother Russia and that their capital lays behind them. Additionally Kutusov has played

on their religious fervor and stirred their souls as Russian patriots. A subtly different fervor to that now dampened amongst the *sans coullotes* facing them. This insight into their character is useful to the deep maneuver commander for it raises a question: what will be the effect of my deep maneuver on my enemy? In the Russian case it did not have the decisive effect for with their stoical outlook, hardiness and sheer fighting spirit it failed to crush their morale. In all their withdrawals up to Borodino and indeed post Borodino the Russian Armies managed to retain coherence and morale. As a factor it may not be the decisive one, but it is certainly important and is an aspect future commanders should consider. Clausewitz in his “paradoxical trinity” goes some way to describing this phenomenon whereby the “blind natural force” or hatred and enmity of the nation shapes the nature of the conflict and the reaction of the combatants.³² In 1812 the life of Mother Russia was at stake so Russian soldiers not only fought tenaciously, but, given their natural character, were less concerned when isolated and cut off.

Napoleonic Conclusion

Napoleon offers an excellent start point for an examination of deep maneuver. At his zenith he commands with the key attributes of a successful deep maneuver commander; those of audacity coupled to the ability for analytical examination of the time and distance calculations of his moves. He saw such calculations “force and energy,” contrasting with the wily Russian, Kutusov who viewed them simply as “problems and difficulties.”³³ At Ulm he demonstrated that momentum is relative, what is crucial is that the speed of the maneuver force must be greater than that of its opponent. At Ulm this momentum paralyzed Mack, but in Russia tardy execution allowed the

Russians to evade successive deep maneuvers with a compensating wearing down of Napoleon's forces. At the operational and tactical levels Napoleon moved his Corps on separate routes speeding the movement of his Army and by maintaining a *bataillon carree* formation he retained the balance to react decisively when encountering an enemy. Finally Napoleon's 1812 campaign in Russia offers a glimpse at a difficult reaction to envisage with certainty, that of the effect on an enemy of deep maneuver to his rear. Russian stubbornness is instrumental in negating such an assault on their cohesion. Napoleons climatic Russian campaign of 1812 offers stark lessons for similar deep maneuver to be waged by Panzer formations one hundred and twenty nine years later.

¹Robert Asprey, *The Rise and Fall of Napoleon Bonaparte* (London: Abacus, 2000), 1:157.

²Roots of Strategy Book 2, Extract From Antoine Henri Jomini's, *Art of War* (Harrisburg PA: Stackpole books, 1987), 404.

³Elements of cavalry, for shock action and reconnaissance, infantry (light and heavy), artillery, logistical trains and general staffs remain extant today.

⁴Peter Paret, *Makers of Modern Strategy* (New Jersey: Princeton University Press, 1986), 134.

⁵United Kingdom Field Manual Volume 1, The Fundamentals Part 1–*The Application of Force* (London: HMSO, 1985), 151.

⁶Asprey, 1:170.

⁷*Ibid.*, 1:170.

⁸On 21 October 1805, Admiral Villeneuve's feint to the West Indies failed and the Battle of Trafalgar, which ensued, seals the fate of the *Grande Armee D'Angleterre*. This event has clearly still to occur as Napoleon heads East.

⁹Steven T. Ross, *Napoleon and Maneuver Warfare* (The Harmon Memorial Lectures in Military History-Washington D.C: Office of Air Force History, United States Air Force, 1988), 321.

¹⁰Carl von Clausewitz, *On War* (New Jersey: Princeton University Press, 1976), 119.

¹¹Alexander Smirnoff, *The Russian Defense Against Napoleon* (Army Quarterly, Vol. 16, 1928), 138.

¹²Dr David G. Chandler, *On the Napoleonic Wars-Collected Essays* (London: Greenhill Books, 1994), 209.

¹³The Continental System issued as the Berlin Decree of November 1806 effectively cut trade from all the nations of Europe to Britain. It laid great store in the purchase of French goods and in movement by road to facilitate enterprise. As an example of an economic warfare plan the Berlin Decree is first class in its breadth and clarity, but as a realistic method of “war” against the greatest naval power of the time it is inherently flawed.

¹⁴Gunther E. Rothenberg, *The Art of Warfare in the Age of Napoleon* (Indiana University Press, Bloomington, 1978), 53.

¹⁵Smirnoff, 143.

¹⁶*Ibid.*, 140.

¹⁷*Ibid.*, 335.

¹⁸Bagration links up on 27 July 1812. His fight against Jerome in the south is one of withdrawal. Vastly outnumbered he has no choice, but to withdraw. A brief counter attack by Bagration at Mogilef on 22 July exploits a tactical weakness on behalf of Jerome and highlights Bagration's tenacious character, but is of no overall consequence and operationally only slows the much needed link up of the Russian armies.

¹⁹Richard K. Riehn, *1812 Napoleon's Russian Campaign* (New York: John Wiley and Sons, 1991), 219.

²⁰*Ibid.*, 219.

²¹*Ibid.*, 220.

²²Chandler, 196.

²³Smirnoff, 334.

²⁴Ibid., 335.

²⁵Ibid., 338.

²⁶Ibid., 339.

²⁷Chandler, 198.

²⁸Ibid., 192.

²⁹Ibid., 198.

³⁰Ibid., 201.

³¹Ibid., 202.

³²Clausewitz, 89.

³³Riehn, 406.

CHAPTER 3

GERMAN EXPERIENCES: WORLD WAR II

The sheer pace, audacity, technical competence and the ensuing crushing effects of the Blitzkrieg unleashed on Poland in 1939 and on France in 1940, mesmerized even great students of war, such as Churchill. Poland fell in twenty-seven days, France thirty-nine days, and lesser campaigns in more difficult terrain such as Yugoslavia and Greece were concluded in twelve and twenty-one days, respectively. Stunning victories, but how? Both the personal accounts and historical studies of German tactics in these campaigns are voluminous and detailed; indeed the sheer breadth of the *Wehrmacht's* campaigns makes identification of the lessons for deep maneuver complex. Therefore for brevity this chapter seeks only to outline the conduct of a given campaign, if merely to give the reader his bearings, and then concentrates on drawing the tremendous lessons learnt for deep maneuver.

Background

The Versailles Treaty of 1918, amongst many stipulations, limited the Imperial German Army, its name then changed to the *Reichswehr* after the Kaiser's exile, to 100,000 officers and men, removed armored vehicles and culled offensive aircraft. Its aim was simple: prevent a resurgent Germany and when coupled to encirclement by a newly created Poland it was hoped that Germany had finally been tactically and strategically neutered. The effect was not, however, that envisaged and when German ingenuity, to overcome the treaties limitations, combined with the motivation of National Socialism developed a mode of warfare that out-thought its more lethargic European

enemies. The manpower limitations of the treaty ensured that only the best officers and soldiers remained in the army, men such as Heinz Guderian and Erwin Rommel, who above all else wanted to learn the concluding lessons of World War 1 and to capture the now relatively mature technologies of the tank, airplane and wireless. Guderian, in particular, owed his initial ideas to British theorists such as Captain Basil Liddell Hart and Colonel J. F. C. Fuller who “excited his interest and gave him food for thought.”¹ The focus on technology also suited the character of a vibrant Nazi party and the more practical aspirations of German industrialists. The old adage that, “lessons learned in defeat are the best lessons” speaks volumes at the contrasting attitude of victors and vanquished for German zeal was mirrored by equal zeal in the French and British camps to get back to the “good old days.” The Spanish Civil War of 1936-1939 additionally offered a “laboratory” on future war, one that an un-constrained Germany capitalized upon.² The lessons drawn from this war do, however, offer a quick insight into the art of “crystal ball gazing” that are as relevant today as they were in 1939. Whilst large-scale maneuvers seldom took place, microcosms of tank, artillery and aircraft cooperation occurred throughout and were extensively reported by French, German and British observers alike. F. O. Miksche, a Czechoslovakian officer who fought with the International Brigade in the Spanish Civil War, was astute enough in May 1941 to identify that, “this experience [Spanish Civil War] was brushed aside by the leaders of French military thought, who claimed that the scale was so small that no lessons could be learnt which would be applicable to a major war.”³ In reality, actions such as the Republican attack on Aragon in 1938 with 150 tanks, massed on a narrow front, contained all the ingredients of Blitzkrieg. Thus the Versailles Treaty had unwittingly

created the conditions for an efficient, technologically aware and professionally competent German army that had developed a style of warfare that was to confound its enemies, a style of warfare that had been validated in the Spanish Civil War.

Poland 1939

Strategically Hitler had created the conditions to isolate Poland. His remarkable “non-aggression” pact with Russia negated their interference and despite lofty words from Britain and France sheer distance meant that neither could intervene. No major geographical features impeded German maneuver and Poland was effectively surrounded by Germany, or German controlled territory on three sides. The campaign plan sought to envelop and encircle Polish formations with deep maneuver and was envisaged to be as brief and decisive as possible.



Fig. 6. German Campaign in Poland. Strategic deep maneuver to encircle Polish forces. Reprinted from West Point Military History Series, *Europe and the Mediterranean* (New Jersey: Avery Publishing Group Inc, 1986), 6.

After two days of hard fighting on the border maneuver space was gained and the Panzer formations could move with momentum.

Colonel Hans Von Luck offered a unique perspective on deep maneuver in his recollections in Panzer Commander. As a reconnaissance battalion commander in Poland, France, Russia and North Africa he understood all the stresses that deep maneuver could place upon a commander. He sat at the very “tip of the spear” and viewed, General Erwin Rommel in particular, at close quarters. In 1939 he too was surprised, but not shocked at his orders to lead his divisions advance into Poland as the following excerpt illuminates. 26 August 1939, and as he drove east through Gleiwitz local people asked, “Are you going to Poland?” “Of course not, we’re going on maneuvers” was the reply.⁴ 0445 hours 1 September 1939, blank ammunition had been handed in and Von Luck was rolling east. Von Luck took his first casualty as he pushed across the border and recounted the incident thus, “suddenly a round of machine-gun fire hit Private Uhl, not far from me. He was dead at once. He was the first casualty in my company, and many of my men saw it. Now we were all afraid. Which of us would be next? This was no longer a maneuver; it was war.”⁵ Deep maneuver in Poland had started in earnest.

Preceding the ground attack had been extensive preparation by the *Luftwaffe* to remove the Polish Air Force. Ordinarily portrayed as a great feat of deception, and a hallmark of this and future Blitzkrieg campaigns, the results were mixed. “Material results were often meager, [but] airpower caused widespread demoralization and disruption . . . and the Poles were forced to move by night.”⁶ However, it was the removal of the Polish Air Force early in the campaign and above all the effects on Polish cohesion that are the more important lessons to learn from this aspect of the campaign. In this now

confused environment the deep maneuver commanders had both the freedom to maneuver and above all the conditions to exploit their subsequent enemies fissures. The air flank is crucial to deep maneuver and in both the Germans, and similarly to follow in the Israeli experience, the dominance of this part of the battle space was arguably a prerequisite for successful deep maneuver.



Fig. 7. General Heinz Guderian commanding XIX Corps in Poland. Arguably the first to do so by wireless from an armored car. Reprinted from Ballantine's, *Illustrated History of the Violent Century – Guderian* (New York: Ballantine Books. 1973). 68.

On the ground, Guderian had secured his appointment as commander XIX Corps⁷ and then ensured that the campaign plan had allocated a decisive role to his corps in securing the neck of the Polish corridor (fig. 6) This armored command suited Guderian and he now only had to prove that such a formation, as he had been arguing for all these years, could be decisive. Accompanying the lead division Guderian quickly understood, after being bracketed by his own artillery and thrown from his command vehicle, the risks of such forward command. “Guderian retired on foot and had a word with the over eager artillerymen (not a difficult conversation to reconstruct, one imagines) and changed vehicle.”⁸ Understandable nervousness plagued the initial drive by Guderian’s troops and hearing that his 2nd Division was being compelled to withdraw by Polish cavalry Guderian recounts, “I was speechless for a moment; when I regained the use of my voice, I asked the divisional commander if he had ever heard of Pomeranian grenadiers being broken by hostile cavalry. He replied he had not and assured me that he could now hold his positions.”⁹ The following day Guderian saw fit to drop three levels of command and led the forward battalion of this division crossing the Kamionka River and consequently ensured the regaining of momentum by his Corps. After twenty-seven days of hard fighting and rapid maneuver all Polish forces were either defeated or encircled and victory was declared, but what had the *Wehrmacht* done that so out-stripped their numerically equivalent enemy?

From the outset the campaign plan had no vision of “expensive” *materielschlacht* battles to destroy Polish forces, instead they were to be encircled and as a consequence negated. The formations unleashed on 1 September 1939 were ruthlessly professional and in a “central paradox the authoritarian Germans had far greater confidence in their

subordinates. To generate independence, freedom had to be granted. To train men toward responsibility, authority had to be delegated. To create trust, reliability and long standing acquaintanceship had to be assured.”¹⁰ Such a climate of professionalism and trust would allow even low level commanders to exploit enemy weakness without ever looking over their shoulder for approval. The aim here is not to convey some *matey*¹¹ command nirvana, as Guderian's experience showed, he too had to push his subordinates, but to highlight a style within which deep maneuver could flourish. F. O. Miksche succinctly identified that the *Wehrmacht* had gone beyond Ludendorff's 1918 tactics of infiltration and had developed what he terms as, “irruption.”¹² Irruption best equates to “penetration” in modern doctrinal terms, but conveys a more violent effect. Polish forces, still anticipating broad advances to bite vast chunks of terrain, *a la* 1914-1918, instead were faced by armored penetrations on narrow fronts of at maximum twelve miles, by 1918 standards an inconsequential width. The irruption or penetration was achieved by local superiority and massing on narrow fronts using combined arms formations down to often company level. The effect of combined arms, or battle grouping, is important for it gave commanders both the means and the freedom to maintain momentum. Thus in twenty-seven days a combination of shattering an enemies cohesion through air and deep maneuver harnessed by dynamic, but above all trusted commanders brought about Polish defeat. The Polish generals had been out-fought, out-thought and surprised by the single-minded application of deep maneuver; a fate that their allies were to taste the following May.

France and Western Europe 1940

Take the hill and establish yourself there until I arrive with the tanks. Don't look left or right, only forward all the time. If you get in to any difficulties let me know.¹³

Order to 7th Panzer Division reconnaissance battalion commander, 8 June 1940.



Fig. 8. General Eric Von Manstein, creator of *Sichelschnitt* (cut of the sickle) in 1940. Photograph source: <http://www.achtungPanzer.com/gen8>.

Dining informally with Hitler, General Eric von Manstein, whom Guderian regarded as “our finest operational brain”¹⁴ was able to convince Hitler that *Fall Gelb* (Case Yellow), itself a modified Schlieffen Plan of 1914 vintage, could be replaced with an altogether more daring operation focused on piercing the allies by a switch of *schwerpunkt* from Belgium to the Ardennes. Such an operation would allow armored formations to seize the crossings over the Meuse, mask the Maginot line and encircle the more mobile allied formations to the north and enable a race to the sea (fig. 9). Manstein, not a tank expert, was comforted by Guderian’s agreement that such a plan was viable. The plan was approved and on 10 May 1940 Bock’s Army Group B engaged the British

Expeditionary Force and the French Field Army in the Low-Countries as expected by the allies. After three days of hard fighting he had achieved the fixing of the allies and created the conditions for German armor to penetrate in the Ardennes on 13 May 1940. This fixing is an important lesson for the deep maneuver commander for not only had the Germans identified a weak point in the allied defenses in the Ardennes, but had also expanded its effect by drawing off mobile forces to the north. Such an effect is significant as it multiplies the inertia of an enemy who not only has to block one move and now must turn, in this case through 180 degrees. The effect is transitory, but substantial and was then compounded by the sheer speed and drive of Guderian's and Rommel's drive west.¹⁵

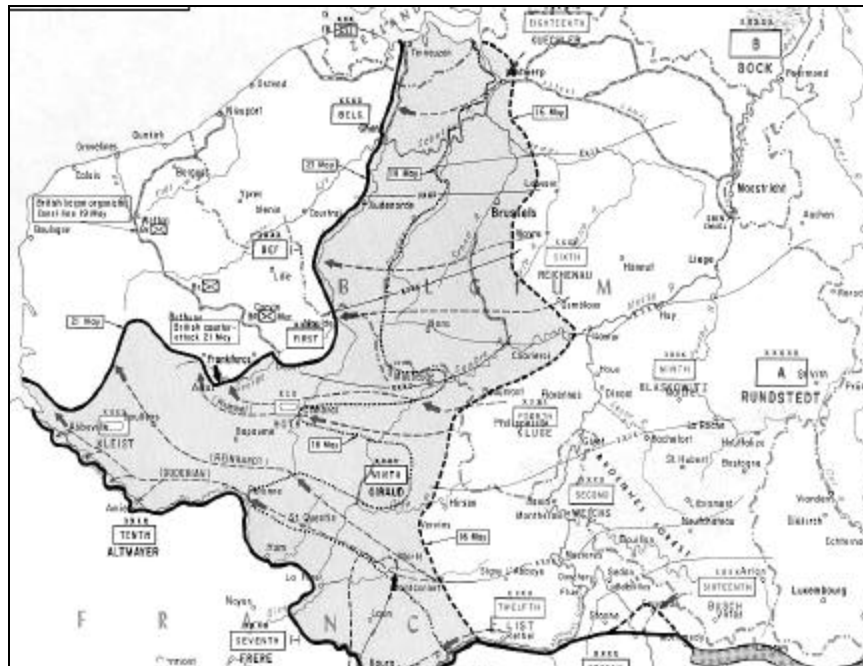


Fig. 9. German Campaign in Western Europe 1940. Source: West Point Military History Series, *Europe and the Mediterranean* (New Jersey: Avery Publishing Group Inc, 1986), 12.

Rather like striking an ice block severely in its center with a chisel, Guderian and Rommel knew that a piercing, fast moving drive through the allied formations would separate them and above all shatter them into ineffectiveness. This audacity brought them both into direct confrontation with their superiors who, more conservatively, thought that gains should be consolidated by slower paced infantry and not instantly exploited. Guderian, ordered to a fieldstrip on 17 May 1940 to meet his Panzer Group commander, General von Kleist, found himself, “berated for disobeying orders [for not halting his advance].”¹⁶ After a heated conversation Guderian was relieved of his corps. Reinstated later by his army group commander, Colonel-General von Rundstedt, Guderian was permitted to carry out a reconnaissance in force. Guderian promptly “ordered that a wire be laid from there to my advanced headquarters, so that I need not communicate with my staff by wireless, and my orders could not be intercepted by the OKH and OKW.”¹⁷ The headlong advance continued.

Preceding this incident both Guderian and Rommel had crossed the River Meuse on 13 and 14 May 1940. At the Leffe crossing site on 13 May Rommel recounts, “[I] took over personal command of the 2nd Battalion of the 7th Rifle Regiment and for some time directed operations.”¹⁸ His impact was critical for not only did he invigorate a stalled attack, but also opened the defense, thereby enabling deep maneuver to flow. The second order effect on the French is more telling as written in General Gamelin’s (French army commander) captured order, in which he stated that, “the torrent of German tanks must be stopped.” The undertone was clear, desperation. In Guderian’s words, “this was no time for hesitancy, still less for calling a halt.”¹⁹ Guderian fully understood that when operating deep in an enemy rear speed had a quality all of its own.

When discussing speed and its effect deep maneuver commanders are now in the realms of art versus science, for although speed is un-quantifiable in its predicted effects on an enemy, a commander must develop a “feel” for such dynamics. In deep maneuver it would be too simplistic to distill the effect of Guderian’s force into the physics equation $F = MV^2$, for war cannot be conveyed in a mathematical formulae. This formula does, however, encapsulate the notion that a smaller formation (less mass) moving faster (higher velocity) will have a greater overall force on the enemy. This force is not simply kinetic or physical, but more importantly is psychological in its impact on the enemy. With such an oft unseen initial return from greater speed, until it is self evident that an enemy has collapsed, deep maneuver commander’s will need strong willpower to persist when more pedestrian superiors and indeed staff may be calling for a “halt and regroup.”

Unbeknown to the Germans a more damning incident was occurring in the French command that is more telling. At Grand Quartier General Nord-Est, General Georges, the French front commander, sent for his Chief of Staff, Doumenc. The scene in the half lit room is described by a staff captain:

The atmosphere was just that of a family in which there had just been a death. Georges got up quickly and came to Doumenc. He was terribly pale. “Our front has been broken at Sedan! There has been a collapse.” He flung himself into a chair and burst into tears. He was the first man I had seen weep in this campaign. Alas, there were to be others. It made a terrible impression on me.²⁰

On balance most of the panic and collapse in France stemmed from senior commanders who were out of touch with a fast moving battle that they could not understand and even less influence. “When the front commander refuses to rest for four days and breaks down in tears at the receipt of bad news the situation is desperate. There is no hope for an army group when the morale of its commander gives way.”²¹ To the

deep maneuver commander this effect, seen or unseen, is precisely that which he must cultivate and exploit.

In France *Wehrmacht* commanders had remedied the lessons of Poland²² and executed a daring and brutal attack through the Low Countries to fix the allies and then administered the *coup de gras* by plunging westward through the Ardennes. The fixing in Belgium not only held down forces, but also ensured that the effect of deep maneuver was multiplied, by now engaged allied armies. The result was not only destructive on men and materiel, but more importantly their cohesion. The transitory effect of this surprise was not only capitalized upon in the short term, but also developed further as both Guderian and Rommel drove west, alarming their conservative superiors just as much as the enemy. In this instance speed, energetically enforced by commanders from the very front, was used as a weapon to counter enemy plans. The allied ice block had been devastatingly shattered.

Russia 1941: Operation Barbarosa

The most striking feature of Operation Barbarosa, launched on 22 June 1941, is its tactical and operational excellence, that despite “killing an estimated four million Soviet soldiers and capturing another three million along with taking or destroying 14,000 tanks and 25,000 guns”,²³ was conversely doomed to failure by strategic planning weaknesses. The lesson for the deep maneuver commander is not simply one of strategic end states and their viability. German planners had argued incessantly with Hitler over the economic goal of securing the Caucasus oil fields or the military/political goal of capturing Moscow. The broader lesson is more one of knowing and understanding where

your deep maneuver is heading for (literally and figuratively) and what effect it is to achieve. In Directive 21 for BARBAROSSA, Hitler confirmed his several priorities; Army Group North (von Leeb) was to seize Leningrad, Army Group Center (von Bock) to advance as far as Smolensk and to then divert half its armor north to support the Leningrad attack and similarly to be prepared to send half south in readiness to move into the Ukraine. Army Group South (von Runstedt) was to seize the economically important Ukraine. On completion of the Leningrad and Ukraine attacks Army Group Center was then to reconstitute and continue its eastward advance. Even when viewed on the simplest of diagrams (fig. 10) the concept was flawed and simply increased wear on vehicles, particularly over the vast distances of Russia, with inconclusive results. It is not for nothing that many armies set as their master principle amongst their principles of war as “selection and maintenance of the aim.”

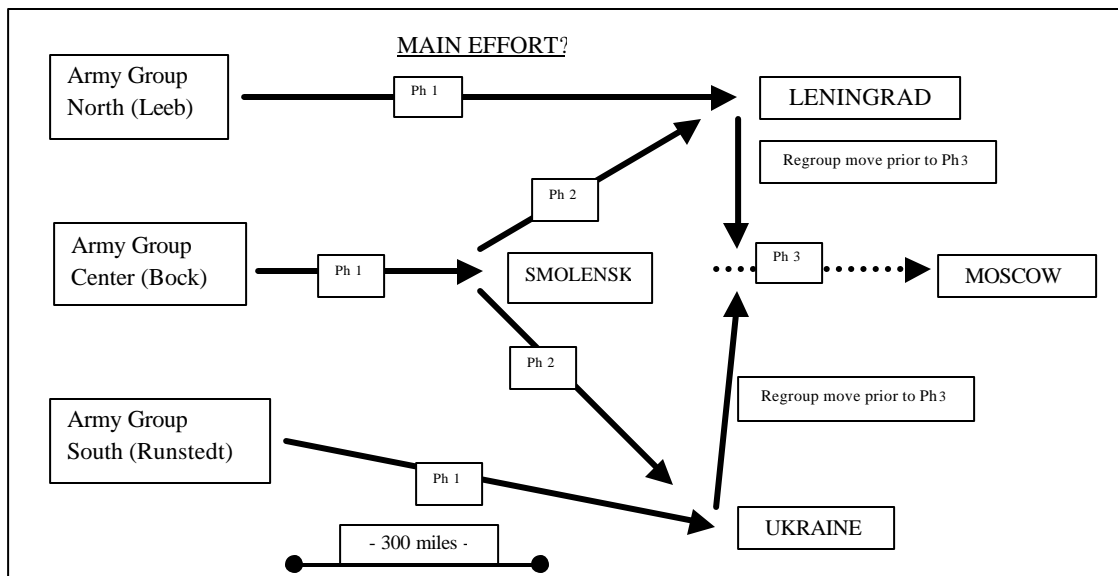


Fig. 10. Schematic Operation Barbarosa Plan 1941. Source: Author.

German commanders put aside their voiced concerns over strategic plans and end states to create, again as in Poland and France, a crushing series of encirclements and deep maneuver that once refocused on Moscow on 30 September 1941 in Operation Typhoon brought 35th Infantry Division into the suburbs of Moscow. ‘Kobes’ Witthaus recounts, “I managed to penetrate right into the suburbs of Moscow. There, I was cut off but we were able to remain hidden for two days until we were forced to withdraw by a Russian counterattack.”²⁴ John Erikson noted that: “Sixteen hours after the opening of Operation Barbarosa the German Army in the east had virtually unhinged two Soviet fronts, the Northwestern and Western. At the junction, the Soviet 11th Army had been battered to pieces; the left flank of 8th Army and the right flank of 3rd Army had been similarly laid bare, like flesh stripped to the bone, which lay glistening and exposed. The covering armies in the Soviet frontier areas were being skewered apart.”²⁵ The full recanting of the German eastern front campaign would take too long, if the campaign is to be given justice, and a brief summary is therefore in the endnotes.²⁶ If one subscribes to the notion that, in 1941 “the Germans were within a few hundred kilometers short of destroying socialism in Russia” the lessons are crucial.²⁷

Perhaps the greatest lesson is that deep maneuver may have its limitations and the ice block analogy fits well with Operation Barbarosa. Despite decisive penetrations leading to the capture of vast numbers of prisoners the sheer space of Russia meant that they never shattered the ice block, indeed one could argue that they never emerged on the other side, but stalled deep inside; unlike France 1940 where they penetrated and emerged on the Channel Coast. This concept is not to say their deep maneuver was not the ideal *soup de jour*, but rather that it had limitations and may be better suited to

smaller geographically areas. If used on a large landmass it needs either to be reinforced both logistically and with follow on forces if its effects are not to be negated. Within such landmasses speed continues to be a factor for distance multiplied by time has a corrosive effect on a force and its logistics, it is also important if one wants to rapidly conclude a campaign that is teetering on the brink of logistical failure. Guderian understood this factor and argued with von Kluge that rather than wait for infantry reinforcements he should force a crossing of the Dnieper River and continue his advance. He said, “I defended my plan with obstinacy making the point that every day’s delay would allow the Russian defense to grow in strength until the ability of the infantry, when it at last arrived, to destroy their line seemed highly problematical.”²⁸ His argument was that of a classic Panzer commander whereby speed would allow a much smaller force to defeat a larger, but confused and ill prepared force. In many ways a return to the $F = MV^2$ formula. His argument is reworked by Ariel Sharon in 1973, but in that case lost, as he clashed with his superiors to be allowed to hastily cross the Suez Canal in order to achieve similar effects on Egyptian forces early in the Yom Kippur War.

Logistically the Wehrmacht was not prepared for a winter campaign, or the vast distances of Russia. Engineers valiantly changed the gauge of Russian railways to suit German rolling stock, but their logistical efforts paled. Couple this to changes in the direction of the campaign and logisticians were not able to support, in modern parlance, the main effort. Von Luck as he drove west to assume a new command in North Africa is telling when he said of traffic on his journey, “No sound of battle; only a few supply vehicles moving east.” This was not the Red Ball Express so vaunted by the Allies after D-Day. In France and subsequently in North Africa, German troops were also able to take

risk by assuming that they could capture enemy supplies. Such an option was not available to them in Russia as distances and the logistically light, but hardy, Russian forces failed to generate any succor to Panzer formations. Contrast this with North Africa where a British soldier understood the detail of logistics, “We had a go at them, or they had a go at us. Then one of us fucked off.” “In doing so the British left behind the means for Rommel to sustain his advances far beyond the point where logistical analysis, by both sides, confidently predicted they must come to a halt.”²⁹

The impact of National Socialism is at first glance an incongruous factor for a deep maneuver commander to consider, but when one translates this into treatment of both population and enemy forces on capture a more sinister impact emerges. This impact was to make movement in Russia all the more open to the “friction of war.”³⁰ For a deep maneuver commander’s forces are almost certain to come into extensive contact with civilians and, if successful, to take hordes of prisoners. This may differ from close battle commander’s who will have to consider the same factors, but to a lesser extent as refugees flee from the front in advance of their attacks and enemy forces withdraw. Consider the impact of the “Commissar Order” authorizing the summary execution of political officers. Most German commanders claim, notably at Nuremberg, that they never received such an order, but commissar’s lives were always short once captured and mistreatment of civilians seemed to have taken place fairly early on. At the tactical level Von Luck understood that such an order merely stiffened resolve and “turned out to be a boomerang. The Commissars . . . kept their men in check by telling them, “If you fall into German captivity, you will be killed at once. If you take just one step back, we’ll kill you.””³¹ This endemic racial hatred that quickly emerged and Stalin’s masterful imagery

of turning the war into a “National Patriotic War for Mother Russia” turned the war into a basic fight for survival. Consequently, this kept tenuous supply lines to deep maneuver formations under constant partisan attack, ensured that enveloped Soviet forces continued fighting and welded together resolve, a resolve that deep maneuver by Panzer formations had hitherto shattered.

German successes in Russia should not be underestimated or overshadowed by the final result and for deep maneuver commanders the accounts hold great lessons. Underpinning their final failure, however, was a basic confusion over the direction of the campaign and its goals. Was it to secure resources in the Ukraine and Caucasus or to destroy the Soviet army and with it the Communist state? Such confusion translated tactically and operationally into vast road marches for Panzer formations, with diminishing effects. To the deep maneuver commander this should be heresy for he should know what the end state is and where it is to be found; and then be left free to pursue this goal. Speed and deep maneuver, unless one has available unlimited resources, are the keys to destroying an army over vast distances. Such moves must be pursued ruthlessly and above all supported logistically and with follow on forces. In Russia, Panzer formation commander’s achieved huge gains, but stalled logistically and took time to reconstitute enabling the enemy to regain composure and resolve. Treatment of populations and prisoners is a factor that many dashing commanders would like to relegate into the “of no consequence” realm. The reality is, however, that they will almost certainly meet both the populous and enemy prisoners and consequently they must ensure that their attitude is not turned so that further action is made all the more difficult.

German Conclusion

In executing deep maneuver German Panzer commanders were able to achieve surprise, speed and superiority with overwhelming results. Surprise encompassed: technical expertise, conceptual use of armored and air formations and strategic identification of *schwerpunkt*. Speed built on the transitory effect of surprise and when harnessed by a command style that at its very roots embodied initiative was able to punish enemy weakness and lethargy: speed itself became a weapon. Superiority was never achieved strategically in any campaign, but by an understanding that it need only be local to achieve effect, an *irruption* or penetration of often only twelve miles on an enemy front was enough to shatter cohesion and to pass fast moving combined arms formations deep into an enemy rear. Logistically German formations met with mixed success, Poland and France were not without their difficulties, but capture of enemy stocks and relatively short supply lines kept formations moving. In Russia the vast steppe negated such efforts and would consequently hinder the bold moves executed by experienced commanders. Perhaps the greatest significance of the German campaigns of 1939-1941 is that the true limitations of deep maneuver emerged. In France and Poland deep maneuver was able to penetrate to the heart of enemy formations, shattering cohesion and turning senior commanders into tearful impotents. In Russia its successes were not as decisive, partly because of the lesser effect on the stoical Russian, but also because it never shattered the Russian cohesion as a whole. The ice block remained as one. The final outcome of German aggression understandably over-shadows their tactical brilliance. In achieving such brilliance the schools of World War I and the Spanish Civil

War were critically formative for the German Army, but by 1939 they had “grown up and left school.”

¹Heinz Guderian, *Panzer Leader* (New York: Ballantine Books, 1957), 10.

²Effectively from 1931 Hitler chose to ignore the stipulations of the Versailles Treaty. Initially covertly and then, from 1934, openly he increased the size of the *Reichswehr* from 7 to 27 Divisions, including 3 Panzer Divisions that had formed by October 1935. Source: Ballantine's, *Illustrated History of the Violent Century-Guderian* (New York: Ballantine Books, 1973), 53.

³F.O. Miksche, *Attack: A Study of Blitzkrieg Tactics* (New York: Random House, 1942), 11.

⁴Hans Von Luck, *Panzer Commander* (New York: Dell Publishing, 1989), 27.

⁵*Ibid.*, 29.

⁶Martin van Creveld, *Airpower and Maneuver Warfare* (Alabama: Air University Press, 1994), 37-38.

⁷XIX Corps consisted of 2nd and 3rd Panzer Divisions and 20th Motorized Infantry Division.

⁸Ballantine (*Illustrated History of the Violent Century-Guderian*), 69.

⁹Guderian, 52.

¹⁰Dr Richard Holmes, *Battlefields of the Second World War* (London: BBC Worldwide, 2001), 32-33.

¹¹British word for “friendly” or “chummy” atmosphere.

¹²Miksche, 15.

¹³Von Luck, 44. The divisional commander is Rommel and the Reconnaissance battalion commander is Von Luck.

¹⁴Ballantine (*Illustrated History of the Violent Century-Guderian*), 81.

¹⁵Rommel had not commanded armor in Poland, he had been in charge of Hitler's bodyguard, but now commanded 7th Panzer Division and in remarkably short time understood the art and detail of commanding such a formation.

¹⁶Guderian, 87.

¹⁷Ibid., 88.

¹⁸B.H. Liddell-Hart, *The Rommel Papers* (New York: Da Capo Press, 1953), 10.

¹⁹Guderian, 86.

²⁰General Andre Beaufre, *1940 The Fall of France* (London: Cassell, 1967), 183.

²¹British Army Field Manual Vol. 1, Part 1, *The Application of Force* (London: Ministry of Defense, 1985), 168.

²²For an excellent summary of “lessons learnt from Poland” and how the Wehrmacht implemented them in 1939-1940 see: S.J. Lewis, *Reflections on German Military Reform* (US Army Military Review No 68, 1988), 60-69.

²³R.D. Hooker, Jr, “*The World Will Hold Its Breath*”: *Reinterpreting Operation Barbarossa* (Carlisle, PA: US Army War College Quarterly - Parameters, Spring 1999), 150-164.

²⁴Von Luck, 78.

²⁵John Erikson, *The Road to Stalingrad* (New York: Harper and Row, 1975) 131-132.

²⁶The initial operations went well in the center where huge bodies of Russian troops were trapped successively in the Bialystok, Minsk and Smolensk pockets by the advance of 2 and 3 Panzer Groups on either flank. By 5 August Army Group Center had advanced 500 miles, taken 600,000 prisoners and captured or destroyed 5,000 tanks. In the Ukraine, operations against the stronger Russian forces went slower, but by 8 August at Uman they had captured 103,000 prisoners. Progress towards Leningrad was far less satisfactory, partly because of the unfavorable terrain but mostly because of disagreements over the use of armor and Hitler’s interference. Von Leeb had split 4 Panzer Group for flank protection. By mid-September Leningrad was too strong to be stormed. Ensuing arguments over the campaigns direction stalled forces and Guderian personally flew to see Hitler on 23 August to argue that the advance on Moscow should be resumed. He failed in his argument and the Ukraine battles continued. Kiev was captured in mid September with a further 450,000 prisoners. Hitler then changed his mind within a week of meeting Guderian and issued Directive 35 ordering a major offensive against Moscow. By then the autumn rains had arrived, turning the ground into a morass. The wear and tear of these constant marches by Panzer formations ensured that when Operation Typhoon was launched against Moscow on 30 September tank strength was at seventy-five percent and infantry strength was at fifty percent. Although 730,000 Russians were captured in the Byansk and Vyazma pockets and Guderian advanced 130

miles in the first four days the offensive bogged down. Zhukov's West front had been substantially reinforced and 4 Panzer Group was halted on the Volga Canal only nineteen miles north of Moscow. On 8 December Hitler was forced to call off the attack. Source of Operation Barbarossa summary: British Army Field Manual Vol. 1, Part 1, *The Application of Force* (London: Ministry of Defense, 1985), 135-138.

²⁷Condoleezza Rice writing in: Peter Paret, *Makers of Modern Strategy* (New Jersey: Princeton University Press, 1986), 670.

²⁸Ballantine (*Illustrated History of the Violent Century-Guderian*), 113.

²⁹Holmes, 69.

³⁰Carl von Clausewitz, *On War* (New Jersey: Princeton University Press, 1976), 120.

³¹Von Luck, 69.

CHAPTER 4

THE ISRAELI EXPERIENCE: THE APOGEE OF BLITZKREIG¹

Israel . . . should seek to reduce to the [greatest] extent possible the duration of the Fighting: and in every military confrontation would strive for a clear, decisive and visible military victory.²

A. I. S. Nusbacher

In examining the Arab-Israeli wars of 1967 and 1973 one finds oneself battling between the extraordinarily successful military outcomes utilizing deep maneuver and the reality that Israeli success was often borne not by such decisive tactics, but from ruthless determination to succeed expressed as fighting spirit and high morale. That this ruthlessness was in part generated from a fear of annihilation by its Arab neighbors is a key motivation. In harnessing this motivation into tangible doctrine there is an irony that Israeli armored doctrine builds upon *Blitzkrieg* and *Aufstragtaktik* derived from a nation that at one point in history dedicated its national resources to exterminating the Jewish people. A. I. S. Nusbacher's study of this evolution, whilst focused on the Golan Heights in 1973, explores this natural development. In his interviews, with Israeli commanders, grudging respect is given by them to Guderian and Rommel, but their statements reflect lessons more from J. F. C. Fuller and Basil Liddell-Hart as much to hide German influence as to also show the roots of German thinking. With Rommel and Guderian setting the scene in the previous chapter moving to the Israeli experience is therefore not only logical from a theoretical perspective, but as will also be shown logical from an examination of tactics. This study of Israeli operations draws upon both the 1967 Six Day War and the 1973 Yom Kippur War. In doing so it seeks to draw upon the best lessons for deep maneuver balanced with the failings and stark lessons learnt. There may appear

to be the occasional historical schizophrenia as lessons jump from both conflicts, but by drawing the best lessons rather than attempting to mold a single operation or campaign to suit all ends the greatest benefit for the deep maneuver commander should be derived.

Geo-Political Considerations



Fig. 12. Israel and immediate neighbors. Source: <http://www.cia.gov/cia/publications/factbook/geos>

Surrounded by strongly armed neighbors, compelled the study of war on several fronts. Since the possibility of such a war invariably involved the prospect of Fighting against superior force, this problem, too, had to be carefully examined. The strict limitations of our resources compelled the General Staff to study how a war could most quickly be conducted.³

Heinz Guderian, Panzer Leader

As much as the fear of annihilation should be seen as a motivating factor, Israel's geo-political situation must be examined to set in context their view of an often-precarious existence in the Middle East. Guderian's view of Germany's situation in 1938,

whilst stretching the reality of the time, does, however, encapsulate an accurate view of Israeli Defense Forces (IDF) thinking in 1967 and 1973. These wars may have lessened this phobia, but not exorcised it. Israel has no strategic depth and although it emerged from the 1948-1949 War of Independence with more territory than that granted in the 1947 United Nations Security Council Resolution it nevertheless has inherited troublesome borders. With a width of just a few miles in some places to at best a few score miles any Arab neighbor can quickly and easily attack population centers and industrial assets. This reality gives rise to a desire “that fighting must be transferred to Arab territory to the greatest possible extent.”⁴ Demographically the population of Israel is insignificant⁵ when compared to the combined numbers of its Arab neighbors. Even with the mass immigration evident since 1948, keeping a large standing army would inhibit economic growth. A nation in arms concept has therefore been sought once quipped as, “We are a nation of soldiers on leave for eleven months of the year.”⁶ Great power patronage to secure resources and to possibly fall back upon for political and military support, preferably in the guise of the United States, was initially articulated by its first Prime Minister, David Ben-Gurion. Ben-Gurion understood that a small state such as Israel could never be self-sufficient and should not consequently find itself isolated in time of war. Such patronage, whilst generating international leverage, also produces a “political stop-watch” inevitably bringing Israel and its adversaries to the negotiating table. The correlation between cease-fire lines and ultimate political settlements is evident since 1949; hence the importance of the stop watch. With a backdrop of constrained geography, limited manpower and a political stopwatch the aggressive and dynamic pursuit of deep maneuver by the IDF makes sense.

Break Through Battle

Finding an open flank or weak enemy area to permit deep maneuver and the subsequent space to allow forces to roam free is often simply not possible. A break through battle may be needed to create the essential space requisite for deep maneuver. The subtlety between a direct attack to defeat an enemy force and an attack to permit the onward passage of a deep maneuver force is often lost in the mire of battle. The subtlety must not, however, be lost on the attacking commander. He must understand and more importantly convey to his subordinates that a swift, crushing and decisive battle must be fought if the deep maneuver force is not to culminate. General Israel Tal (fig.12) on



Fig. 12. Brigadier General Tal and Colonel Conen in the former's command vehicle.
Reprinted from British Army Field Manual Vol. 1, Part 1, The Application of Force (Ministry of Defense, London, 1985), 143.

5 June 1967 knew he faced just such a breakthrough battle. He did not know that the 5th was day one of only a Six Day War. The northernmost of three Israeli Ugdas,⁷ his task was to break through Egyptian and Palestinian forces defending the “Opening of Rafa,” a narrow tract of land between the sand dunes on the coast and the sand sea to the south. He knew that “the first day of the war would decide the war” and that his Ugda was to spearhead this first day.⁸ Tal, a natural philosopher and the tank expert in the IDF, started his armored career as a carrier platoon sergeant in the British Army in the Second World War. He went on to become a machine-gun officer in the Haganah⁹ and only after the 1956 Sinai Campaign, when he saw the importance of the Armored Corps, did he transfer. Tal brought coherence to Israeli doctrine based largely on the writings of Liddell-Hart and the experiences of Guderian, which he coupled to a strict disciplinary outlook. He was a consummate professional who understood that in a fundamentally technical Corps only adherence to discipline and rules would succeed. In response to his critics who saw his style in direct contrast to “Kibbutz style” he cited the following example, “A Paratrooper with a deep inner discipline is capable of fighting bravely and tenaciously, even when he is hungry and his shirt is torn. But no tank will function, even given the most rousing Zionist orations, when there is no fuel in the tank or when it has thrown a track.”¹⁰

Facing General Tal's Ugda was a brigade of 20th Palestinian Division in Khan Yunis and two brigades of 7th Egyptian Infantry Division at Rafa Junction (fig.13) covering the coast road. A further brigade was deployed in depth. In all the position was thirty-five miles deep. Tal's aim was to break through this “crust” before the Egyptian 4th Armored Division could counter-attack and stifle the Israeli deep attack across the

Sinai. Tal was clear that he must succeed at the first attempt and that a time-consuming attritional battle was not an option. The Ugda had armored punch,¹¹ but lacked infantry and artillery balance. Avoiding the obvious maneuver corridor and consequently well-defended area around the Opening of Rafal, Tal decided to attack along the coastal strip. He reasoned that the Egyptians would not have mined the coastal road and rail line nor registered their own camps in this area with artillery. Gonen, with 7 Brigade, would break through the light defenses in Khan Yunis to attack Rafal Junction from the north and drive on to El Arish. Eytan's brigade was to cross the border and attack Rafal from the south. Menachim was to navigate along a track in the sand sea and link up with a parachute drop on El Arish airfield.

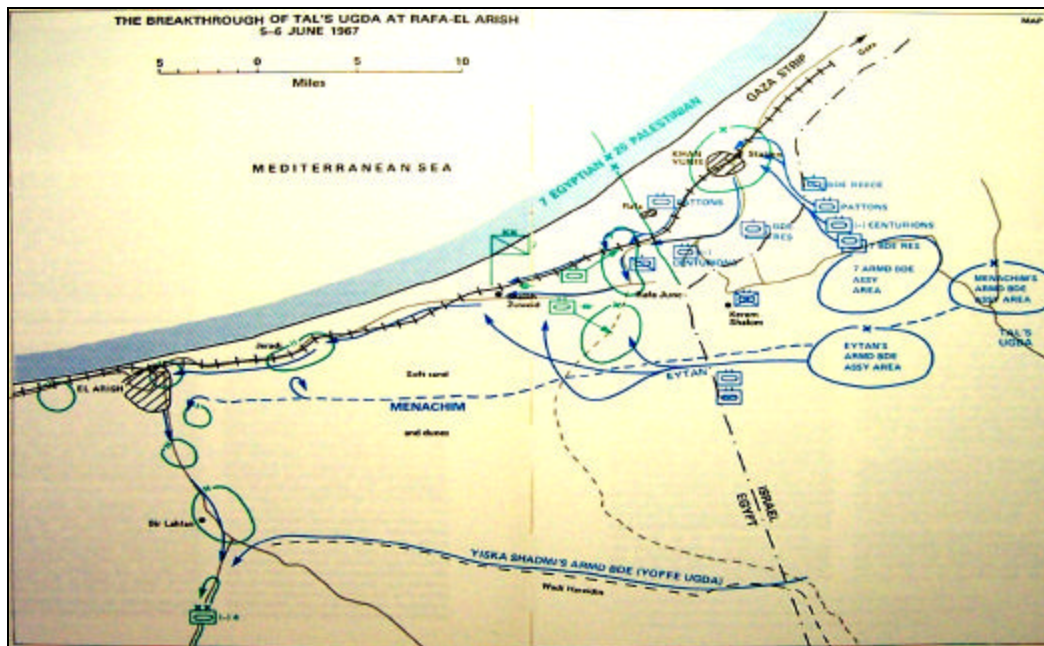


Fig. 13. The breakthrough of Tal's Ugda at Rafa El-Arish 5-6 June 1967. Reprinted from British Army Field Manual Vol. 1, Part 1, *The Application of Force* (London: Ministry of Defense, 1985), 148-149.

At Khan Yunis the Israeli's discovered that a brigade now sat where they had anticipated a battalion. A break down in communication within the lead Patton armored battalion caused a delay, but the battalion was able to rally at Khan Yunis station in accordance with their preliminary orders. The sudden arrival of sixty tanks caused the Palestinians to surrender en masse. With no infantry in support, the armor could do little to capitalize on this breakdown in cohesion. The Palestinians made up for their initial shock by holding up a subsequent mechanized brigade for three days. As the lead tanks of 7 Armored Brigade pushed on to Rafal Junction, the Egyptians waited until they were within one hundred meters of their positions before unleashing their ambush. Gonen then attacked in a pincer movement with the Centurion battalion continuing to advance along the road whilst the Patton battalion moved west. Simultaneously the Egyptians launched a counterattack with T54 tanks. These ran straight into the pincer movement and were defeated with the loss of nine tanks. On seeing this, the Egyptian infantry went quiet and the Patton's moved into the Egyptian divisional rear area overrunning gun positions, the divisional headquarters and killing the divisional commander. Gonen then committed his reserve of two Centurion companies and a jeep reconnaissance company to maintain momentum. At the Jeradi defile the Centurions passed a sleeping Egyptian battle group.¹² The reconnaissance company was not so lucky and after two vehicles were destroyed the defile was closed by a now alert Egyptian position. Eytan's brigade fared worse. Lack of all arms training separated the tanks from the paratroopers who were then counterattacked by an Egyptian tank battalion. Tal diverted Gonen's Patton battalion south to deal with this threat. In the interim, Israeli Fouga Magisters destroyed this

Egyptian counterattack. Tal now reoriented his advance centered on Rafa Junction.

Menachim's brigades slow advance was curtailed when the parachute battalion he was to link up with diverted to Jerusalem. Jordan had entered the war. To clear the Jeradi defile Gonen ordered a frontal attack down the road combined with a flank attack over sand in the south. The attack was repulsed with the killing of the commanding officer (CO) and wounding of three company commanders. The second in command rallied the battalion and rushed the position taking it with the loss of one tank. The Egyptians recovered from this shock and held up follow on elements. By now darkness had fallen and the Ugda was now spread over thirty miles centered on the obstinate block at the Jeradi defile. Tal realized that his attack was faltering and with it any hope of breaking through the "crust." He now reinvigorated the advance. Releasing a mechanized battalion from mopping up operations at Rafal Junction and a Patton company he augmented Gonen's brigade and placed at the mechanized battalion COs disposal the entire Ugda's artillery, including an illumination shoot. The battalion CO urged his drivers forward to reach the defile forcing waiting administrative vehicles off the road to allow his passage. Pausing to regroup prior to the defile he then called for the illumination shoot to enable the centurions to give covering fire and attacked. After breaking through the defile, the battalion then spent the next four hours clearing a mile of trenches backwards to the start of the defile. The following morning Tal's Ugda attacked south from El Arish to link up with Yiska Shadmi's armored brigade moving up from the south. The crust had been broken and Israeli armor was free to strike deep towards the Suez Canal.

Israel Tal created the conditions for the subsequent Israeli rout of the Egyptians in the Six Day War. In modern American doctrinal parlance his was a shaping operation,

but it should additionally be viewed as *the* decisive operation for, without this break through the overall Israeli plan would have stalled. His determination and single-mindedness, particularly during the confused night at the Jeradi defile, translated into a determined attack that maintained the objective.¹³ The mistakes over combined arms cooperation within his formation are evident and arguably throughout this battle he also accepted risk by being off balance at various periods. His feel for the battle was, however, faultless as he constantly sought to bring about a decision and focused efforts towards this point. As an example of a break through battle to enable deep maneuver, the 5-6 June 1967 at Rafal-El Arish is first class. Tal was also conscious of the chaos many might have perceived in his Ugda as they fought west and resisted against a natural tendency in many military minds to tidy the battlefield in order to stop and consolidate. He knew that to do so would cost him time and momentum, allowing the Egyptians, similarly working in this chaos, to gain composure.

Chaos and Balagan¹⁴

How better to exemplify the natives' improvisational capacities than in descriptive analysis of how Israelis park their vehicles in a lot. Even when there is plenty of space, the painted lines are perceived not as fixed limits but merely as suggestive points of departure.¹⁵

In a recent article in the British Army Review¹⁶ on "The Management of Chaos" the author, through a series of complex graphs and diagrams espoused how the modern commander must be adept at managing chaos in all its guises on the battlefield. A study of the Israeli military character and their "grip" of chaos more vividly proves that in deep operations commanders must expect, understand and then capitalize upon chaos.

Managing chaos is in short unachievable, but working within chaos and using it to one's advantage is not. Consider the following experience from 1967:

Brigadier Ben-Ari relates an episode, which illustrates Israeli acceptance of chaos not in action against the enemy, but in using internal lines of communication. On the last day of the war, his 10th Mechanized Brigade was ordered to move from the Central Front near Jericho to the Golan Heights. He was given 24 hours from the warning order to have his brigade in its new position, some 180km away. He called all the brigade drivers (some 1000 men) together, and briefed them on the timing. He told them that between them and their goal there were only two roads. There were military police checkpoints, other units and fuel dumps where logistics officers would expect signatures in return for supplies. He did not care how they made it to the Golan, he said, just so long as they were there by the next morning at 0400. Every vehicle in the brigade was at the rendezvous by 0400.¹⁷

Ben-Ari's view is Clausewitzian in nature, but reflects an understanding of the dynamics of movement on the battlefield, in his case even without the added complication of enemy interference. War to the Israelis was seen as a complex and at times inexplicable phenomenon that would place commanders and soldiers alike in situations unplanned for and diverse. Failure to do *something* in such a situation is tantamount to surrendering one's destiny to the gods, in this case Mars and he is now on the other side. This "fog of war" is acting on both sides and only those comfortable with chaos are likely to endure for attempting to manage it is not possible. The counter-argument that chaos is not solely peculiar to the deep battle is true, but consider the dynamics of a commander during deep maneuver. He is operating at the limits of surveillance and communications; his logistics will at best be extended and at worst cut for periods of time. Reconnaissance and familiarity with the ground will not be complete despite any advances in technology. As far as is humanly possible Israeli commanders such as Ben-Ari and Tal have been able to operate and succeed in such conditions. Tal's

outlook on chaos was remembered by his 7 Armored Brigade commander already on his third war by 1967, “In war nothing goes according to plan, but there is one thing you must stick to: to the major designation of the plan. Drum this into your men.”¹⁸

Major General Ariel Sharon 1973

Ask a group of staff college students¹⁹ for the name of a successful deep maneuver commander and United States General George S. Patton with his flamboyant dress, language and style will almost inevitably emerge as an archetypal deep maneuver commander and consequently he too often clouds discussion on command attributes in such a situation. More often the reality is that successful deep maneuver commanders have been studious technicians such as Guderian and Von Runstedt who have understood the need to, “in the midst of emotional pressures, to juggle considerations such as the speed of tanks over various terrains, the availability of fuel, or the likelihood of the rendezvous coming off.”²⁰ Major General Ariel Sharon (fig. 14) sits as a complex character that combined an “almost implausible mixture of physical machismo and intellectual brilliance.”²¹ More Patton than Von Runstedt in terms of persona, his “physical machismo” and with it a proven willingness for ferocity in combat, emerged in the early years of the Israeli State. A fighter with the Haganah during the War of Independence he continued combat against Egyptian troops and in one 1955 Gaza Strip operation killed 38 Egyptians. In 1967 during the June Six Day War, as a divisional commander, he captured the West Bank, East Jerusalem and the Gaza Strip.²² Intellectually, with a degree in oriental history, he chose to bring a professor in ancient

history onto his Southern Command staff and remained scornful of his contemporaries whom he derided as, “suburbanites with degrees in economics.”²³



Fig. 14. General Ariel Sharon, 1973. Official IDF Photograph. Reprinted from Insight Team of the London Sunday Times, *The Yom Kippur War* (New York: Doubleday and Company, 1974), 326.

Sharon was to spearhead the IDF's offensive deep into Egypt with the aim of reversing Israeli fortunes in the 1973 Yom Kippur War. Split between the Golan and the Sinai, the IDF on 11 October 1973 faced the unnerving reality that it was being drained at a rate, in terms of men and materiel, that it could not sustain, even with American re-supply. The double specter of a Russian resupply of SAM-6 missiles to its Arab dependants also threatened to shift the air war balance between the Egyptian and Syrian air defenders and the Israeli Mirage and Sky Hawk pilots. The *normal* default setting for Israeli commanders faced with such a military conundrum would be an unexpected and devastating deep maneuver, an option Sharon vociferously advocated. The IDF, however,

did not simply have the combat power at this stage. By nightfall, a fierce battle to clear the last remaining Syrian positions at Khusniye and Kuneitra on the Golan was won not by guile, but by a costly frontal charge.²⁴ The fortified piles of rubble were secured and initial Syrian successes began to wane as they withdrew in disarray. With the Syrians now withdrawing²⁵ and the Golan effectively secured Sharon now had the conditions to cross the Suez Canal and decisively defeat the Egyptians. Operation Gazelle was authorized.

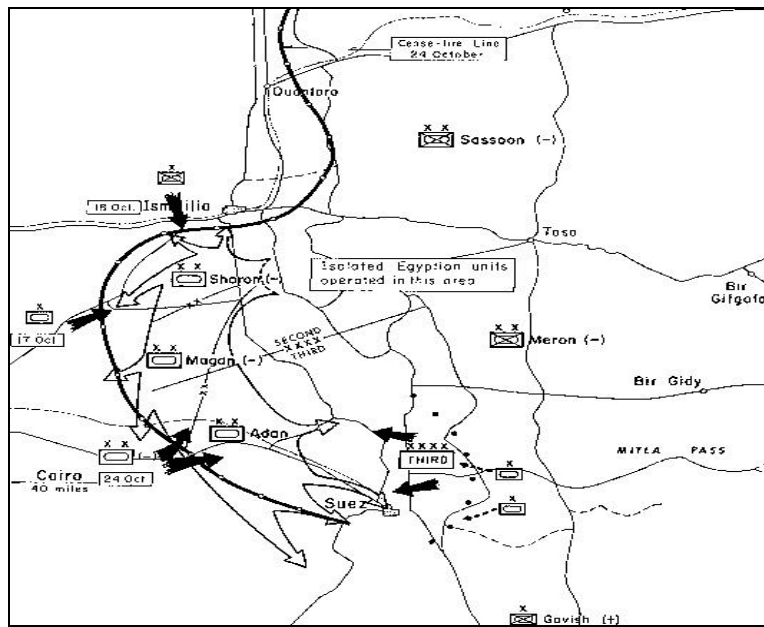


Fig. 15. Outline of OPERATION GAZELLE 18-23 October 1973. Reprinted from West Point Military History Series, *Atlas for the Arab-Israeli Wars* (New Jersey: Avery Publishing Group Inc, 1986), 47.

Sharon's crossing of the Suez Canal in OPERATION GAZELLE (fig.15) and the ultimate defeat of the Egyptian Third Army has often been cited as an exemplary

example of deep maneuver and its ability to shatter an enemy's cohesion. One commentator hinted at "military genius."²⁶ The reality behind this myth is one of vicious combat and confusion, both self-induced and from the chaos of war. The Israeli plan, hopelessly optimistic, called for three divisions to cross at the tip of the Bitter Lakes and to decisively encircle the Egyptian Second and Third Armies in forty-eight hours. "Hopelessly optimistic," for the Israelis wrongly assumed that the Egyptians had reverted to their 1967 competencies. Movement to the crossing site was initially held up in vicious fighting at Chinese Farm on the two roads leading to the site. Sharon later described this battle as, "it was as if a hand-to-hand battle of armor had taken place. . . Coming close you could see Egyptian and Jewish dead lying side by side, soldiers who jumped from their burning tanks and had died side by side. No picture could capture the horror of the scene, none could encompass what had happened there."²⁷ The crossing itself proceeded with minimal opposition, but poor planning had the Ugda crossing in rafts in painfully slow fashion. Lack of Egyptian response, however, enabled a small foothold to be established, but no great armor reserve to break out. The initial foothold consisted of no more than two hundred men, including Sharon. Meanwhile armored battles raged to the north and south of the crossing as the Ugda attempted to clear the route for heavy engineering plant. By daylight no bridge had been established and under, now zeroed Egyptian artillery, the engineers began to establish the crossing site. The navigator of the lead barge, Sergeant Zvi recounted, "there was a tank battle on both sides of the road and we were going down the middle. It was a battle for the junction and the junction was in their sights and they hit every vehicle that went through there. We were a slow convoy, very easy to hit . . . There were a few hits . . . a few holes. With dawn, we got to the

crossing area.”²⁸ By 0800hours thirty tanks had made it across on rafts. The Egyptian Second Army in the northern area of the crossing responded by launching a battalion counter-attack, which was defeated by the small bridgehead force. This piecemeal attack was to characterize Egyptian operations over the next few days with a succession of uncoordinated attacks lacking mass and the necessary combat power to destroy the Israeli forces. They did, however, succeed in negating an Israeli move north to interdict Second Army’s supply lines. Focus for the Israeli advance switched consequently south towards Suez. From 19 to 23 October General Adnan passed through Sharon’s bridgehead and exploited south to Suez, not at the 200km per day rate of the 1967 war, but at a more pedestrian 20km per day.²⁹ The constriction of Third Army in the south was only complete by 24 October after heavy fighting and a breaking by both sides of a cease-fire initiated on the 22nd.

Whatever the reality of Sharon’s operation, the effect must be remembered. The crossing and deep penetration to isolate the Egyptian Third Army effectively ended the war for Egypt and the annihilation of this Army was only prevented by the timely second cease-fire on the 24th. Sharon, true to his character, had from the outset pushed for a rapid penetration across the canal into “Africa.” Cooler heads in the shape of General Gonen, the Southern Front Commander, resisted Sharon’s protestations. Their viewpoints were never reconciled and at one point in a volcanic radio conversation Sharon shouted at Gonen, “if you had any balls, I’d tell you to cut them off and eat them.”³⁰ Sharon’s perspective on the strategic dilemma facing Israel was that conserving resources in the Sinai until the Golan had been recaptured only gave time and space for the Egyptians to consolidate, making it more difficult for them to be destroyed later. A decisive early

move would stifle Egyptian initiative, albeit the carefully choreographed Egyptian initiative.

When one looks at Sharon's character it is easy to see the attributes of dash, vigor and decisiveness, married to a willingness to take risks, however, as a man of clear intellectual capability his concept and execution for the Operation Gazelle crossings were remarkably flawed in their lack of coordination and detail. Here is the dichotomy for the deep maneuver commander when honing his command and leadership skills. In many ways he must have the confidence and imagination coupled to a ruthless determination to prosecute a bold plan, taking risks when his staff and subordinates may openly disagree with his methods. Ideally this drive must be harnessed to an acute understanding of the details of their trade if the confusion at Chinese Farm and on the Suez crossing are to be avoided. Risk is applicable to all military operations, not solely deep maneuver, but commanders must identify these risks and through forethought and planning ensure they remain understood risks and not gambles. General Ariel Sharon was guilty of gambling, not risk management, but remained lucky enough to win his gamble in October 1973.

Conclusion: Israeli Deep Maneuver

Unique geopolitical circumstances make the Israelis' adoption of deep maneuver understandable. A narrow country with a small population means only quick victory on its adversaries' soil could negate the disastrous effect any war would have on the people and economy of the country. When additionally coupled to their ebullient character against that of their neighbors it reveals why they chose not to develop a "fortress Israel" mentality and became *masters* of deep maneuver. As a "textbook" example of a break

through battle, General Tal's actions with his Ugda on the night of 5 and 6 June 1967 are exemplary. His ruthless pursuit of his aim, or objective in US doctrine, enabled a massive deep penetration by the balance of Israeli forces. By not allowing himself to become embroiled in a deliberate battle of destruction he effectively "drove through"³¹ the Egyptian positions and ensured his subordinates continued to move west instead of dwelling on the destruction of the enemy.

For the deep maneuver commander an understanding of the dynamics and pitfalls of such a battle are crucial and Tal's lessons are self-evident. Keep focused on the end-state, ensure your subordinates are of the same mind and maintain momentum at all costs to prevent your enemy consolidating and thereby stifling your break through. That the night of 5 and 6 June 1967 was chaotic would be to naively understate the ferocity of the fighting, but such a situation suited not only the character of the Israelis, but also their spirit. The willingness of commanders, at all levels, to endure this chaos and to capitalize upon its effect is a crucial style for a deep maneuver commander to adopt. By its very nature he will find himself in a part of the battle-space that in terms of his understanding is not complete and will be chaotic. Knowing and understanding the dynamics of chaos on the battlefield, and most importantly, not being over-awed by such effects is a facet of command the Israelis understood and is critical for a deep maneuver commander. General Ariel Sharon offers a complex character for study and many writers have drawn differing conclusions from his actions as a divisional commander in October 1973. These conclusions range from genius to "military dementia."³² By combining his clear drive and tenacity with a willingness to take risks one sees a style that espoused, "To hell with the bridgehead, the important thing is to get behind the Egyptian lines."³³ His contempt for

detail and planning nearly derailed Operation Gazelle and without the “help” of Egyptian ineptitude he almost certainly would have failed, with disastrous results for the Israeli state. The characteristics of a deep maneuver commander if one draws from good and bad Israeli lessons should ideally be one of risk-taking and drive balanced with a keen eye for detail and the realities of the situation. General Ariel Sharon had more than enough of the former, but often scant regard for the latter.

If the Israeli lessons of 1967 and 1973 epitomized the “Apogee of Blitzkrieg” they also served as a model for the development of US Air-Land Battle doctrine. The fall of the Berlin Wall in 1989 saw that this doctrine was never to be tested in the theatre intended, but was to be used during the 1990 and 1991 Gulf War.

¹Martin Van Creveld, *The Sword and the Olive* (New York: Public Affairs, 1988), 179.

²A. I. S. Nusbacher, *Sweet Irony: German Origins of Israeli Defence Forces' Manoeuvre warfare Doctrine with Particular Reference to Israeli Land operations on the Golan Heights, 1973* (Ontario: War Studies Program Royal Military College of Canada, 1983), 43.

³Heinz Guderian, *Panzer Leader* (New York: Ballantine Books, 1957), 10.

⁴Rodman, David. “Israel’s National Security Doctrine: An Introductory Overview.” *Middle East Review of International Affairs*, Sep 2001, 2.

⁵Combined totals for Egypt, Jordan, Iraq and Syria are 116million against 6 million Israeli’s. Source: CIA Fact Book 2002 accessed at <<http://www.cia.gov/cia/publications/factbook/geos/jo.html#People>>

⁶Rodman, 4.

⁷Ugda is an Israeli Division. In reality there are no standing Israeli divisions so an Ugda is best described as a formation bigger than a brigade.

⁸ Teveth, Shabtai. *The Tanks of Tammuz* (New York: Viking Press, 1969), 155.

⁹From its initial foundations as a Jewish underground terrorist and civil defense organization The Haganah evolved into the IDF in 1948 at the direction of David Ben-Gurion. Source: <<http://www.us-israel.org/jsource/History/haganah.html>>.

¹⁰Teveth, 69.

¹¹General Tal's Ugda consisted of 7 Romani Armored Brigade. Probably the best armored brigade in the IDF and commanded by a disciplinarian, Colonel Shmual Gonen. 7 Brigade was a conventional armored brigade of two armored battalions, a mechanized infantry battalion and a reconnaissance company. One further armored brigade commanded by Colonel Menachim (composition as for 7 Brigade) and a scratch brigade commanded by Colonel Raphoul Eytan consisting of an armored battalion and a parachute battalion hurriedly issued APC's in the week proceeding the war.

¹²A battle group is a task-organized battalion normally based upon either an armored or infantry battalion. Equates to a task force in the US Army.

¹³Objective. The first US principle of war. Source: US Department of the Army Field Manual 3-0, *Operations* (Washington D.C: US Department of the Army, July 2001), 2-3.

¹⁴Authors note: Russian for complete mess.

¹⁵Nusbacher, 41.

¹⁶British Army Review (BAR) published every Autumn models itself as the "magazine of British military thought." Whilst paid for by the UK Ministry of Defense the editor enjoys considerable latitude.

¹⁷Nusbacher, 39.

¹⁸Teveth, 126.

¹⁹Test conducted by author on his United States Command and General Staff College Staff group (14 pers) in Dec 02. Whilst not exhaustive it was nonetheless illuminating. Napoleon also emerged high on every students list.

²⁰Insight Team of The London Sunday Times, *The Yom Kippur War* (New York: Doubleday and Company, 1974), 324.

²¹*Ibid.*, 324.

²²Source: BBC News Profile on Ariel Sharon accessed at <http://news.bbc.co.uk/1/hi/world/middle_east/1154622.stm>

²³Insight Team, 326.

²⁴*Ibid.*, 239.

²⁵Speculation has been made that in concert with tactical victories such as Khusniye and Kuneitra the Israeli's may have rattled their nuclear saber to precipitate a Syrian withdrawal from the Sinai. Van Creveld, 280.

²⁶*Ibid.*, 337.

²⁷Gawrych, Dr George W. *The 1973 Arab-Israeli War: The Albatross of Decisive Victory* (Leavenworth Papers No 21, US Army Center of Military History, 1996), 62.

²⁸Insight Team, 334.

²⁹Gawrych, 68.

³⁰Insight Team, 337.

³¹Van Creveld, 187.

³²Insight Team, 337.

³³Insight Team, 337.

CHAPTER 5

THE 1990-1991 GULF WAR

Most Americans loved it [the Gulf War]. Why not? The TV was good, the body count low, and the enemy bad.¹

Robert Scheer

Our strategy to go after this Army is very, very simple. First we're going to cut it off, and then we're going to kill it.²

General Colin L. Powell, 23 January 1991.

Perhaps if Sir Percy Cox, the British High Commissioner who, “whipped a red pencil out of his pocket and simply sliced Kuwait from Iraq” had taken a little more time then Saddam Hussein’s intelligence coup of invading Kuwait on 2 August 1990 may not have happened. History is not full of such foresight and consequently a dizzying array of coalition forces gathered in the autumn and winter of 1990-1991 to, “undertake operations to seek the complete withdrawal of Iraqi forces from Kuwait.”³ Even twelve years later the ink is still wet on the history of Operation Desert Storm with the consequence that opinion is firmly divided between two camps who either see it as the pinnacle of maneuver warfare or something lesser that merely encapsulated a technological victory enabling the pleasure of “kicking [Iraqi] ass.”⁴

The actual “Hail Mary”⁵ maneuver planned and executed by coalition forces owes more to von Schlieffen and 1914, with its broad wheeling motion into Kuwait (fig. 16), than such decisive deep maneuver as planned by von Manstein in his *Sichelschnitt* (cut of the sickle) of 1940. Such a comment is not derisory, but highlights the lack of true deep maneuver from which to draw lessons from. This chapter is therefore shorter than those

preceding it and focuses heavily on two important aspects of the campaign: airpower and XVIII Airborne Corps flank attack deep into Iraq.

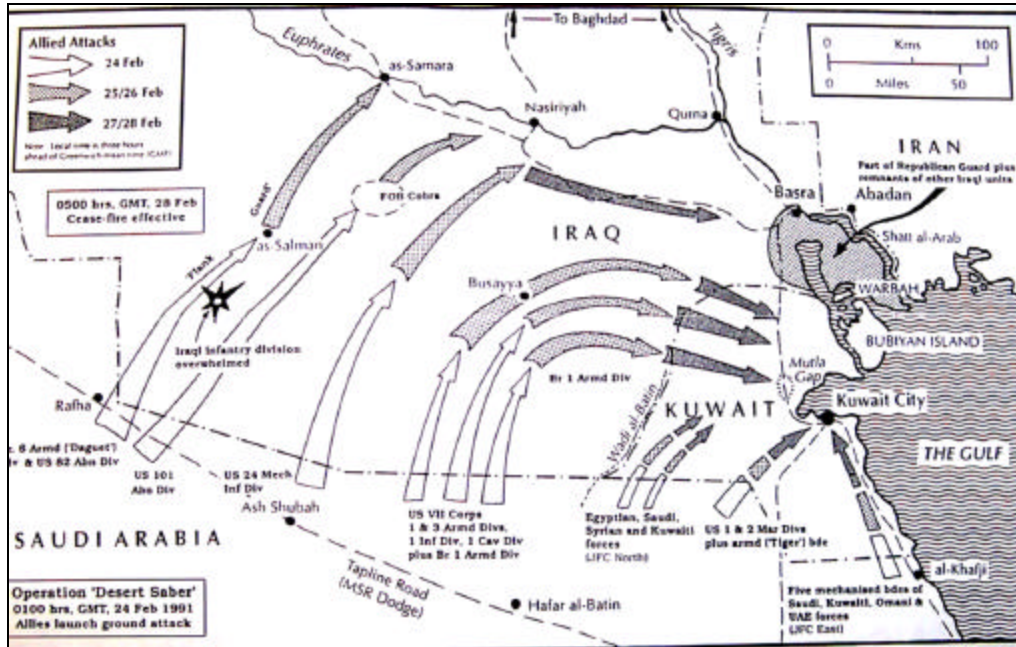


Fig. 16. OP DESERT SABER - “The 100 hundred hours war.” Note the deep maneuver of XVIII Corps forces in comparison to bulk of coalition forces. Reprinted from Defense and International Affairs Department, *The Gulf Conflict 1990–91* (Sandhurst: The Royal Military Academy of Sandhurst, 1994).

Iraqi and Coalition Plans

For whatever reason, Saddam Hussein and his military commanders had left open their western flank into Kuwait thus creating an opportunity to avoid his assertion that, “I do not belittle you but . . . I have taken the geography and nature of American society into account. Yours is a society that cannot accept 10,000 dead in a single battle.”⁶ His plan was akin to Soviet “sword and shield” tactics whereby successive defensive lines would defend Kuwait and form a shield from behind which fast moving armored forces would

counter-attack. The Republican Guard formed the sword, though whether it sat behind the bulk of Iraqi force to act as a sword or as a deterrent to retreat is a moot point. Large-scale maps belittle the sheer space and distances to be found along the Iraqi-Kuwait-Saudi borders. As (fig.17) simplifies, the Kuwait Theatre of Operation had effectively become a box containing the bulk of Iraqi forces.

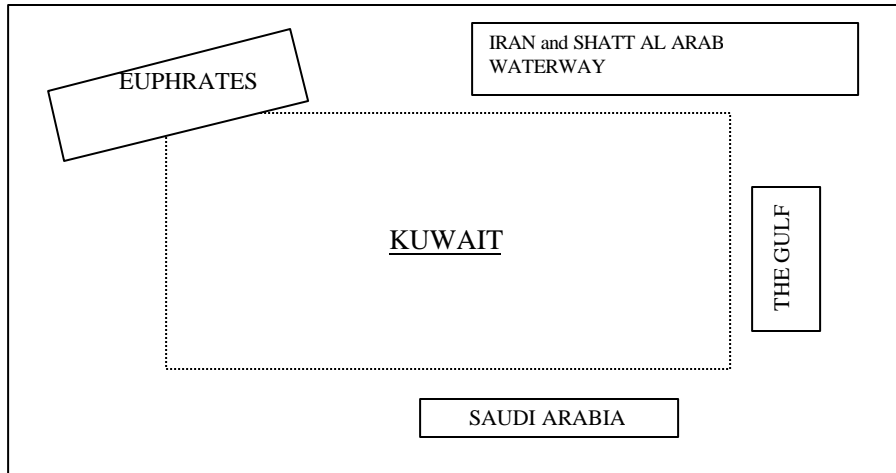


Fig 17. Kuwaiti Theater of Operation. Source: Author.

On the coalition side only after a sustained air campaign (Operation Desert Thunder,) aimed at the attrition of the Republican Guard to fifty percent and the destruction of Iraqi command and control systems, had been successful would a large wheeling maneuver then throw the bulk of the collations armored forces into Kuwait. On the western flank of this wheel XVIII Airborne Corps would prevent flank attack and cut routes northwest out of Kuwait.

Airpower = Optimum Conditions Created

Even with a determined adversary the overwhelming numbers and technological superiority of coalition aircraft ensured that air superiority was inevitable over Iraqi forces. It did not, however, win the war and as Shimon Naveh, himself a great advocate of the success of the Gulf War and airpower in particular, explained, “territory is the clearest expression of a states sovereignty, and the state’s armed forces are the main armed forces for securing this value. Ground forces will remain the dominant asset . . .to accomplish these objectives.”⁷ What airpower achieved, however, was a masterful masking of extensive movement, not maneuver, to the west by both XVIII Airborne and VII Corps. This when coupled to widespread deception with forces such as “Rhino Force”⁸ relaying exercise radio traffic to continue the illusion of a build up directly south of Kuwait ensured that when struck from the west the Iraqis were overwhelmingly surprised. In terms of pure destruction the results of the air campaign are the subject of fierce debate.

General H. Norman Schwarzkopf, commanding Central Command, ordered his air component to reduce enemy formations to fifty percent resulting in fierce arguments over battle damage assessments (BDA.) After subordinate commanders lost all faith in their G2 (intelligence) staff as BDA estimates fluctuated wildly both Schwarzkopf and his air component commander, General Charles A. Horner, deemed the figures, “so contrived to be irrelevant and gradually gave up chasing numbers.”⁹ What is critical here for a deep maneuver commander is not the “number crunching” of BDA, but the effect airpower, when used correctly can achieve. In 1991 it effectively screened the switch of *schwerpunkt* from Kuwait to the western desert.

Had such a screen been achieved by ground forces, the numbers would have been great (to cover a 300 mile frontage) and inevitably Iraqi intelligence would have been alerted. The deep maneuver then executed by XVIII Airborne Corps could then arguably have faced more robust opposition than it actually did. The BDA numbers and the ensuing arguments belie the pulverizing effect on Iraqi cohesion that such punishing air strikes wrought. It not only demoralized, but also cut the means of communication available to commanders at all levels. The breaking of cohesion is precisely the setting a deep maneuver commander wants to find he is attacking through; for such fractures are then multiplied several fold by deep maneuver.

As the ground war was initiated airpower then switched to Close Air Support (CAS) missions as its first priority. Here future deep maneuver commanders need take heed for the seamless integration of air and fast moving formations had not been achieved. Indeed as the weakness of Iraqi defenses became evident most coalition soldiers became more concerned over “friendly fire” than enemy. The Gulf War failed to demonstrate the integration of air intimately into the ground commanders maneuver plan; instead it was viewed as a “scene setter,” admittedly an important one, but nonetheless not crucial. As a consequence the air campaign took on more the style of a deliberate strategic bombing campaign, not a fast moving and responsive maneuver force. Had the coalition faced a more alert opponent this lack of intimacy and with it flexibility may have been found wanting. “It [simply] was not integrated into the ground maneuver scheme the same way as the *Luftwaffe* and the Soviet air force were in World War II.”¹⁰ Why the need for such a damning statement? In deep maneuver commander’s may find themselves out-stripping their own indirect fire support or in the interest of capitalizing

upon speed seek to attack larger, but disorganized, forces. In such instances a lack of cohesion with their air arm would at best inhibit their drive and at worst bring about a blunting of their maneuver as insufficient assets can be brought to bear.

Airpower is not the panacea for the deep maneuver commander, weather alone renders it fragile, but it is vital enough that it should be viewed as an integral and crucial part of any deep maneuver plan. To deride it further is to fail to capitalize upon its uses. In setting the conditions for deep maneuver it had few equals, the screening of the coalitions westward move and the shattering of Iraqi cohesion could not have been achieved without vast numbers of ground troops and the requisite loss of surprise. Its destructive power is not its best use, but its effect (often an ethereal concept to convey) is invaluable to a deep maneuver commander as he seeks to advance through a disorganized and confused enemy. To achieve the above a better welding together of ground and air maneuver must be reached if both forces are to be fully capitalized upon.

Ground Maneuver XVIII Airborne Corps

In a simple concept Schwarzkopf ordered Marine and Arab Forces to attack directly north into Kuwait to fix Iraqi forces (and their attention) thereby hopefully achieving the committal of the Republican Guard. Further to the west XVIII Airborne Corps consisting of: 82nd Airborne Division, 101st Airborne Division (Air Assault), 24th Infantry Division, 1st Cavalry Division and the French (Daguet) Division would advance nearly 250 miles to the Euphrates River preventing flank attack and securing any escape routes. The conditions set, VII Corps, a powerful armored formation, would swing north and then east to annihilate Iraqi forces, now trapped in Kuwait.

On the left flank of XVIII Airborne Corps the French (Daguet) Division used an “iron fist”¹¹ tactic of continuous waves of armed Gazelle helicopters, Jaguar aircraft and a shock force of only two companies of AMX 10 wheeled armored cars leading. Not stopping their helicopters when firing, HOT missiles engaged Iraqi armor at ranges of 1500-2000 meters and when one considers the forward movement of the aircraft and the missiles time of flight there would probably have been little room for a reshoot. Puma helicopters followed with re-supply, to pick up downed crews and to extract casualties. Only a sandstorm slowed their rapid progress late in the afternoon. “To their mortification 2nd Brigade of the 82nd Airborne Division followed in buses.”¹² In the center of the Corps the 101st Airborne Division (Air Assault) conducted the largest helicopter assault in history and secured a forward operating base (COBRA) fifty miles inside Iraq allowing its Apache attack helicopters to roam towards the Euphrates River. On the Corps right flank 24th Infantry Division, its H-Hour advanced after the corps commander, Lieutenant General Gary Luck, saw how quickly his advance was proceeding, was unleashed towards the north. “Unleashed” is carefully chosen for the 24th Infantry Division’s commander, Major General Barry McCaffrey, stands clear as one of the few coalition commanders who showed deliberate energy and audacity to strike deep into Iraq. One commentator stated that, “the 24th would have the rare and heady experience of being an armored force stampeding in the enemy’s rear . . . [it] would join a select club.”¹³

In examining the missions allocated to all coalition formations the mission given to the 24th Infantry Division is one of the few that mentions deep maneuver:¹⁴

a. Strike swiftly and decisively deep into the enemy’s rear and flanks

- b. Block the Euphrates River Valley.
- c. Prevent the escape of 500,000 enemy soldiers in the Kuwait theater of operations (KTO), and:
- d. Continue the attack east toward Basra to complete the destruction of the Republican Guards Forces Command (RGFC).

In executing his mission McCaffrey understood that speed must build upon the surprise that his redeployment west had achieved and also that risk could be mitigated by firepower and audacity. His divisional artillery alone could deliver twenty-four tons of high explosive on a target simultaneously.¹⁵ As McCaffrey drove on, Schwarzkopf's frustration with VII Corps more pedestrian pace is clear when he comments, "I began to feel as if I were trying to drive a wagon pulled by racehorses and mules."¹⁶ The 250 mile advance, in thirty-six hours, ultimately achieved by the 24th Infantry Division compares favorably with the fastest advances of World War II, but it is not superior. What emerged is almost a diminishing return on speed whereby armored formations have gained true rapid cross country mobility, but also have such increased logistics demands that they are hampered in their execution. McCaffrey, to some extent, compensated for this by, "loading his division itself with 1.2 million gallons of fuel, enough to get it all the way to its destination."¹⁷ Had there been stronger enemy resistance, even guerilla activity, then such a tremendous logistical tail would have been inherently vulnerable. In another desert campaign in 1942 German commanders quickly identified that, "Supply columns are defenseless and require protection in convoys when the situation is unclear or confused; otherwise, they are apt to fall prey to enemy reconnaissance."¹⁸ The 1942 security lesson is probably the most pertinent for the deep maneuver commander, but also is the sheer

scale of the logistical problem facing contemporary commanders. Such comment does not undermine the phenomenal logistic effort to move XVIII Airborne Corps west and then to sustain its formations. In its report on the Gulf Conflict the Royal United Services Institute attributed the success of XVIII Airborne Corps to, “ the low level of enemy resistance and the ability of logisticians to enable the advance.”¹⁹

Conclusion: Gulf War of 1990 and 1991

Thus it is in war the victorious strategist only seeks battle after victory has been won, whereas he who is destined to defeat first fights and afterwards looks for victory.²⁰

Sun Tzu, *The Art of War*

Sun Tzu’s quote could be tailor made for the coalition concept to defeat Iraqi forces in 1991. It should also speak volumes to a deep maneuver commander for he must create the optimum conditions before attacking. Optimum conditions to enable his deep maneuver, but also to multiply its subsequent effect. In Operation Desert Storm Schwarzkopf’s switch of *schwerpunkt* west, masked by airpower and augmented by deception measures created the initial surprise. Initial surprise may be belittling of the total effect on the Iraqis for even at the ceasefire talks they expressed disbelief at the extent of coalition advances in the west.²¹ Airpower, not only masked movement, but its effect on shattering cohesion and reducing the exposure of ground troops to prolonged combat is telling. In such conditions deep maneuver flourished as shown by the rapid advances of the French Daguet and US 24th divisions. Logistically efforts to support maneuver became paramount and were not hampered by enemy interference, that otherwise would have had a telling effect. For the deep maneuver commander logistics

are everything and may have, “far more importance than any worries as to whether the enemy should be attacked in the left or right flank.”²² Prophetic words by Field Marshall Kesselring, when one ponders on the carriage of the 1.2 million gallons of fuel carried by McCaffrey’s division alone. The Gulf War of 1990-1991 has been compared to, “a mismatch in which one side was fighting in the style of the First World War (or at best the Second World War without air cover), and the other was using methods devised for the next century.”²³ The analogy is worth retaining at the back of one’s mind when balancing the lessons for deep maneuver, but probably it is too severe and reduces the worth of the lessons to be learned from this campaign. In the areas of speed, command style, logistics, condition setting and above all welding together air and ground maneuver the Gulf War of 1990 and 1991 offers many signposts to the future for deep maneuver commanders.

¹Micah L. Sifry and Christopher Cerf, *The Gulf War Reader* (New York: Times Books, 1991), 492.

²Colonel Harry G. Summers, *A Critical Analysis of the Gulf War* (New York: Dell Publishing, 1992), 180.

³Strategic directive issued to Combined Commander. General H. Norman Schwarzkopf, *It Doesn’t Take a Hero* (New York: Bantam Books, 1993), 450.

⁴Martin van Creveld, *Airpower and Maneuver Warfare* (Alabama: Air University Press, 1994), 215.

⁵At his “mother of all briefings” on 27 February 1991 Schwarzkopf compared his maneuver to American football play. “We did what best can be described as the ‘Hail Mary’ play in football. I think you recall when the quarterback is desperate for a touchdown at the very end, what he does is send every receiver way out to one flank, and they all run down the field as fast as they possibly can into the end zone, and he lobs the ball. In essence that’s what we did.” Source: John Pimlott and Stephen Badsey, *The Gulf War Assessed* (New York: Arms and Armor Press, 1992), 170.

⁶Defense and International Affairs Department, *The Gulf Conflict 1990–1991* (Sandhurst: The Royal Military Academy of Sandhurst, 1994), 1.17.

⁷Shimon Naveh, *In Pursuit of Military Excellence* (London: Frank Cass Publishers, 1997), 324.

⁸Pimlott and Badsey, 156.

⁹Lt Col William F. Andrews, *Airpower Against an Army* (Alabama: Air University Press, 1998), 63.

¹⁰Van Creveld, 217-218.

¹¹Peter Tsouras and Elmo C. Wright, *The Military Lessons of the Gulf War* (London: Greenhill Books, 1991), 99-100

¹²*Ibid.*, 99.

¹³*Ibid.*, 115.

¹⁴Major Jason K. Kamiya, *A History of the 24th Mechanized Division Combat Team During Operation Desert Storm* (Washington D.C: US Army Official History, 1991), 6.

¹⁵Tsouras and Wright, 101.

¹⁶Schwarzkopf, 529.

¹⁷Tsouras and Wright, 101.

¹⁸Major General Alfred Toppe, *Desert Warfare: German Experiences in World War II* (Leavenworth: US Army Command and Staff College, Combat Studies Institute, 1991), 47.

¹⁹Edward Foster and Rosemary Hollis, *War in the Gulf: Sovereignty, Oil and Security* (London: Royal United Services Institute for Defence Studies, 1991), 23.

²⁰Sun Tzu, *The Art of War* (London: Oxford University press, 1963), 20.

²¹Pimlott and Badsey, 191

²²Toppe, 14.

²³Pimlott and Badsey, 169.

CHAPTER 6

CONCLUSION AND PRINCIPLES

Go into emptiness, strike voids, bypass what he defends, hit him where he does not expect you.¹

Sun Tzu

Sun Tzu, in approximately 400-320 B.C. understood the value of deep maneuver and its potential to shatter enemy cohesion. He also knew that in isolation it was unlikely to succeed and is dependent on a great many factors, skills and the right conditions. This thesis has set out to identify those factors, skills and conditions that enable deep maneuver not only to be successful, but also to be decisive. Deep maneuver is not therefore new, but its lack of detailed inclusion in contemporary doctrine highlights our uneasiness with its use as a tactic: an uneasiness that contradicts the most devastating tactics used by some of the greatest military captains of the last two centuries. This uneasiness also contradicts how we envisage the future battlefield, one where we see smaller, agile formations attacking enemy forces on a battlefield with no rear areas and few identifiable flanks. Such a battlefield has already existed on the steppes of Russia in 1812 and 1941, crossing the Sinai in 1967 and 1973 and advancing to the Euphrates in 1991. It is from these battlefields that this thesis seeks to draw the lessons for use by future bold commanders.

Starting with Napoleon Bonaparte we see a commander who, capitalizing on the freedom and vigor of his revolutionary army, at his zenith attacked his enemies to their very core. Out-marching them, out-flanking them and placing his forces deep into enemy rear areas he at once unhinged his enemy's cohesion. At Ulm, in October 1805, Prussian General Mack surrendered after relatively minor engagements once Napoleon had

marched his three corps to the Prussian rear, effectively encircling them. In October 1806 at Jena-Auerstadt deep maneuver by Napoleon again changed an initially advancing Prussian force into one solely focused on preserving lines of communication and retreat. Napoleon, with a surety borne from deep study, had calculated his moves with mathematical precision to convey force and energy at a given point. Not immune from the friction of war he reinforced such calculations with cavalry to screen and provide intelligence and a *bataillon carree* formation that allowed him to meet an enemy force from any direction: his corps always being one day's march from one another. That his revolutionary army could forage off the land with minimal fear of desertion and traveled on separated routes was an added advantage.

If at his zenith in 1805 and 1806 Napoleon just as vividly, with his disastrous Russian campaign of 1812, taught future deep maneuver commanders hard lessons on how not to conduct such maneuver on a large land mass. Tardy execution and close control of his subordinates prevented them from exploiting opportunities presented to them by the Russians. Tardiness also allowed the Russians to react with an equal or quicker speed thereby, negating lunges to their rear. The stoical and hardy Russian soldier also confounded Napoleon by continuing to fight doggedly, as at Smolensk and Borodino, where previous adversaries had broken in rout. In victory and defeat Napoleon offered lessons on command style, movement skills, insight into the effects of deep maneuver on enemy forces and the difficulties of deep maneuver on a large land mass that remain valid today.

The stunning results and sheer professional competence of the armored forces unleashed by Germany on Poland, France and Russia in 1939-1941 offered many

valuable lessons on deep maneuver. A thorough and determined desire to learn the lessons of the World War I, to capitalize on new armored, air and radio technologies and to experiment in the Spanish Civil War created a force that initially stunned its adversaries.

In Poland a plan, always envisaged as one of deep maneuver, created the conditions for a rapid defeat of Polish forces in September 1939. Advancing on narrow fronts, piercing enemy weaknesses and harnessing airpower, Panzer corps commanders, such as Heinz Guderian, firmly established the *Wehrmacht's* credentials for deep maneuver. No fluke of history, the following year they repeated the same feat fighting across France and the Low Countries. Commanders, now including an ambitious Erwin Rommel, confounded enemy commanders with, amongst other skills, their use of speed as a weapon, not only to negate enemy plans, but above all, to psychologically shatter Allied cohesion. Speed, and with it force, cannot simply be distilled into the physics equation of $F=MV^2$ to explain its effects on an enemy, but the equation helps illuminate the effect of relatively small numbers of Panzer formations on the mass of Allied forces.² War remains an art and a science where factors, such as friction, alter the true outcome of maneuver beyond the formula of $F=MV^2$.

In Russia, in 1941, German forces added to their friction by issuing such damning orders as the commissar's order and by their mistreatment of the local population. These actions only served to turn initial adulation on behalf of the population, who were no lovers of Stalin, into hardened supporters of a fight to defend Mother Russia. This outlook coupled to the hardy Russian, who quickly became steeled to his likely treatment on capture, ensured that formations when encircled and cut off by impressive deep

maneuver continued to fight on. Cohesion failed to be shattered both by a combination of natural character, but also by the disincentive of German actions.

The sheer size of western Russia compounded the difficulty of Napoleonic deep maneuver in 1812 and it also did so to the Germans in 1941 highlighting a potential limitation of deep maneuver. Unsupported and un-reinforced deep maneuver will not achieve the shattering of an enemy force on a large land mass. The penetration of forces was insufficient to shatter, in this case, the Russian forces as a whole. Deep maneuver is better suited to smaller geographical areas, as in France and the Sinai, where its effects are felt on the entire enemy force. Such a statement does not remove its use, for its employment remains valid, but it must be built upon when it culminates short of the campaign's goal.

In a central irony the Israeli Defense Force in their wars of 1967 and 1973 demonstrated their adaptation and mastery of *Blitzkrieg* resulting in deep maneuver with the aim of winning quickly, while transferring the fight onto Arab territory; two aims that reflect Israel's precarious geo-political situation.

Savage armored fighting by General Israel Tal's Ugda on the night of 5-6 June 1967 created the conditions for the rapid deep maneuver across the Sinai so devastating in the Six Day War. His battle is exemplary in showing that in executing deep maneuver an assailable flank may not be available and commanders may have to fight to create the conditions to unleash deep maneuver. His, and his subordinates', maintenance of their aim ensured that in a chaotic night battle they persevered. Comfort with chaos is a character trait that emerged from study of Israeli command style. Deep maneuver commanders, above all others, must be comfortable with operating in a confused and

changing environment as they fight on the limit of communications and surveillance assets, no matter their modernity.

General Ariel Sharon offered an interesting study on the ideal command style for the deep maneuver commander. Bold, aggressive and fearsomely intelligent he nonetheless displayed rashness and lack of attention to detail that could so easily have ended in failure as he crossed the Suez Canal into Egyptian rear areas on 15 October 1973. Only piecemeal Egyptian attacks prevented his weak bridgehead, designed to enable deep maneuver, from being destroyed. His actions and decisions, along with consideration of other commanders, in the guise of Guderian, Rommel and Napoleon, demonstrated an ideal command style that encompassed not only aggression and audacity, but also deep analytical thought. It is only through such thought an initial gamble can turn into a viable plan through the identification and mitigation of risk. Sharon continued to press a gamble in October 1973 and never mitigated the risks presented.

Historically, the ink has yet to dry on the 1990 and 1991 Gulf War for its true lessons and context to be fully understood. That does not undermine the validity of the lessons on the integration of airpower, logistics and command style evident from the actions of, in particular, XVIII Airborne Corps formations in February 1991. The historical caveat must be further augmented by the reality that the Iraqis failed to maneuver against coalition forces that enjoyed total technological over-match.

Airpower, by shattering Iraqi cohesion and blinding them to the westward moves of coalition forces, in effect conducted an economy of force mission that created the ideal conditions for deep maneuver to strike an assailable flank. Air integration was not,

however, on a par with that experienced, for example, by German World War II ground commanders and their supporting *Luftwaffe* fighter-bombers.

An unexpected direction of attack and demoralized Iraqi forces ensured that the vast logistical demands placed on coalition logisticians were met with minimal hindrance. The M1A1 tanks of General Brian McCaffrey's 24th Infantry Division had attained true rapid cross-country movement as they struck into Iraqi rear areas on the 25 February 1991. That he needed 1.2 million gallons of fuel to sustain his force highlighted a constraint that handicaps the capabilities of modern armored vehicles. Logistically, the deep maneuver commander must give deep thought to the realities of re-supplying vast quantities of fuel, in particular, if the speed of his advance is not to be compromised.

McCaffrey's command style led Central Command boss General H. Norman Schwarzkopf to comment that, "I began to feel as if I were trying to drive a wagon pulled by racehorses and mules."³ A telling statement comparing McCaffrey's desire to maintain speed with his contemporaries' sluggish execution. McCaffrey's desire for speed was aimed at ensuring Iraqi opposition was constantly reacting to his actions and could not regain its composure to conduct anything like a credible defense.

If the lessons from the Gulf conflict of 1990 and 1991 were difficult to draw with certainty then Operation Iraqi Freedom in 2003 is almost impossible to evaluate. This thesis is submitted only seventy-eight days after the first ground action of this conflict.⁴ Already it is clear that deep maneuver has been employed and that a greater confidence and competence in its execution is evident. In this respect the topic of deep maneuver continues to evolve, be refined and offers new aspects for consideration. From, at best, hasty sources the deep maneuver conducted by Coalition forces demonstrated many

lessons already experienced by deep maneuver commanders of old and summarized in the following principles:

Table 1. Fourteen Principles for Deep Maneuver.

PRINCIPLE	REMARKS
STYLE (COMMANDER)	Bold and aggressive coupled to deep thinking. Consider problems in detail without rashness. Allied to risk management.
STYLE (SUBORDINATES)	Know their end state and work ruthlessly towards. Absolute freedom of action to lowest levels in order to achieve goals.
LOGISTICS	Logistics, logistics, logistics. Think about, be original (air drop, captured, carry more on vehicles) and protect.
SPEED	$F = MV^2$ is not absolutely true (war is both a science and an art), but speed in deep maneuver has a quality all of its own. Speed literally across the ground, in action and in thought. Always relative to enemy.
EFFECT ON ENEMY	Ask this question: will encirclement or having LOCs cut off lead to a shattering of cohesion or stiffening of resolve? Plan accordingly.
CONSIDERATION FOR CIVILIANS AND ENEMY	Linked to effect on enemy. Don't alienate population, as it will only add to friction. Give enemy a moral "way out" and make surrender more palatable.
RISK MANAGEMENT	The commander's initial concept for deep maneuver may be a gamble, but identifying and negating the risks that constitute this overall gamble then make a plan feasible.
SET CONDITIONS	Rarely succeeds on its own. Deceive enemy, focus his attention elsewhere (psychologically and physically) and then strike deep. Be prepared to break through initially.
CONSIDER LIMITATIONS	Deep maneuver best suits smaller geographical areas (e.g. France or Sinai.) If on large land masse consider follow on with additional forces and CSS.
CHAOS	Understand it, negate it, but above all capitalize upon it.
COMBINED AND JOINT AT EVERY LEVEL	Give Commander's at all levels the tools they need to maintain momentum and to exploit opportunities.
AIR	Control of air flank is vital and worthy of separate consideration. Fragile due to weather. Should be integral to ground maneuver, not an adjunct.
FIREPOWER	Mobile and responsive.
SEPARATE AND MUTUALLY SUPPORTING ROUTES	Move separately, move faster, but retain ability to support in any direction.

These principles are the distilled lessons from Napoleon to Schwarzkopf on their use of deep maneuver. Clearly four historical periods, that span only two hundred years

and contain nine separate campaigns are insufficient data points to declare these as immutable principles, in the same way that we now view the principles of war. Similarly the evolving nature of deep maneuver, as demonstrated by the 2003 Gulf War, also showed the need for constant review. The principles shown above are the most succinct way of answering this thesis' research question of: "What are the enduring tenets or principles that emerge from deep maneuver from Napoleon to the Gulf War of 1990 and 1991?" I trust they will be of use to future deep maneuver commanders.

¹Sun Tzu, *The Art of War* (London: Oxford University Press, 1963), 108.

²For example after France and a reorganization of Panzer forces only 40 out of total 200 divisions were Panzer or at best motorized for the invasion of Russia. Source: Ballantine's, *Illustrated History of the Violent Century-Guderian* (New York: Ballantine Books, 1973), 95.

³General H. Norman Schwarzkopf, *It Doesn't Take a Hero* (New York: Bantam Books, 1993), 529.

⁴Thesis accepted 6 June 2003, ground war initiated 20 March 2003.

BIBLIOGRAPHY

Books

- Andrews, LTC William F. *Airpower Against an Army*. Alabama: Air University Press, 1998.
- Asprey, Robert. *The Rise and Fall of Napoleon Bonaparte*. London: Abacus, 2000.
- Ballantine's. *Illustrated History of the Violent Century—Guderian*. New York: Ballantine Books, 1973.
- Beaufre, General Andre, *1940 The Fall of France*. London: Cassell, 1967.
- Chandler, David G. Dr. *On the Napoleonic Wars: Collected Essays*. London: Greenhill Books, 1994.
- Clausewitz, Carl von. *On War*. New Jersey: Princeton University press, 1976.
- Crevelde, Martin van. *The Sword and the Olive*. New York: Public Affairs, 1988.
- _____. *Airpower and Maneuver Warfare*. Alabama: Air University Press, 1994.
- Erikson, John. *The Road to Stalingrad*. New York: Harper and Row, 1975.
- Foster, Edward, and Rosemary Hollis. *War in the Gulf: Sovereignty, Oil and Security*. London: Royal United Services Institute for Defence Studies, 1991.
- Guderian, Heinz. *Panzer Leader*. New York: Ballantine Books, 1957.
- Holmes, Richard. Dr. *Redcoat*. London: Harper Collins, 2001.
- _____. *Battlefields of the Second World War*. London: BBC Worldwide, 2001.
- Liddell-Hart, B. H. *The Rommel Papers*. New York: Da Capo Press, 1953.
- Miksche, F. O. *Attack: A Study of Blitzkrieg Tactics*. New York: Random House, 1942.
- Naveh, Shimon. *In Pursuit of Military Excellence*. London: Frank Cass Publishers, 1997.
- Nusbacher, A. I. S. *Sweet Irony: German Origins of Israeli Defence Forces' Manoeuvre Warfare Doctrine with Particular Reference to Israeli Land operations on the Golan Heights, 1973*. Ontario: War Studies Program Royal Military College of Canada, 1983.
- Paret, Peter. *Makers of Modern Strategy*. New Jersey: Princeton University Press, 1986.

- Pimlott, John, and Stephen Badsey. *The Gulf War Assessed*. New York: Arms and Armor Press, 1992.
- Riehn, Richard K. *1812 Napoleon's Russian Campaign*. New York: John Wiley and Sons, 1991.
- Roots of Strategy Book 2. *Extract From Antoine Henri Jomini's, Art of War*. Harrisburg PA: Stackpole books, 1987.
- Rothenberg, Gunther E. *The Art of Warfare in the Age of Napoleon*. Bloomington: Indiana University Press, 1978.
- Schwarzkopf, General H. Norman. *It Doesn't Take a Hero*. New York: Bantam Books, 1993.
- Sifry, Micah L, and Christopher Cerf. *The Gulf War Reader*. New York: Times Books, 1991.
- Summers, Colonel Harry G. *A Critical Analysis of the Gulf War*. New York: Dell Publishing, 1992.
- Sunday Times, Insight Team. *The Yom Kippur War*. New York: Doubleday and Company, 1974.
- Sun Tzu. *The Art of War*. London: Oxford University Press, 1963.
- Teveth, Shabtai. *The Tanks of Tammuz*. New York: Viking Press, 1969.
- Tsouras, Peter and Elmo C. Wright. *The Military Lessons of the Gulf War*. London: Greenhill Books, 1991.
- Von Luck, Hans. *Panzer Commander*. New York: Dell Publishing, 1989.

Periodicals

- Hooker Jr R. D, "The World Will Hold Its Breath," Reinterpreting Operation Barbarossa," *Parameters* (Spring 1999): 150-164.
- Keegan John, "The Lessons of the Gulf War," *Los Angeles Times*, 7 April 1991, 5.
- Lewis S. J, "Reflections on German Military Reform, " *US Army Military Review* 68 (1988): 60-69.
- Rodman, David, "Israel's National Security Doctrine: An Introductory Overview," *Middle East Review of International Affairs* (September 2001): 2.

Smirnoff, Alexander, "The Russian Defense Against Napoleon," *Army Quarterly* 16 (1928): 138-147.

Government Documents

British Army. Field Manual, *The Application of Force*. Vol. 1, Part 1, London: Ministry of Defense, 1985.

Defense and International Affairs Department. *The Gulf Conflict 1990–1991*. Sandhurst: The Royal Military Academy of Sandhurst, 1994.

Design for Military Operations. *The British Military Doctrine*. London: Ministry of Defense, 1996.

Gawrych, George W. Dr. *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*. Leavenworth Papers No. 21. Ft Leavenworth, KS: US Army Center of Military History, 1996.

Kamiya, Jason K. Major. *A History of the 24th Mechanized Division Combat Team During Operation Desert Storm*. Washington: US Army Official History, 1991.

Toppe, Alfred Major General. *Desert Warfare: German Experiences in World War II*. Leavenworth, KS: US Army Command and Staff College, Combat Studies Institute, 1991.

Wass de Czege, Huba Brigadier General. *Towards a Future Army*. Leavenworth, KS: US Training and Doctrine Command, September 2002.

INITIAL DISTRIBUTION LIST

Combined Arms Research Library
U.S. Army Command and General Staff College
250 Gibbon Ave.
Fort Leavenworth, KS 66027-2314

Defense Technical Information Center/OCA
825 John J. Kingman Rd., Suite 944
Fort Belvoir, VA 22060-6218

LTC Versalle Washington, Ph.D.
Combat Studies Institute
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

LTC Franklin Moreno, M.A.
Center for Army tactics
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

Military Attaché
British Defence Staff
British Embassy
3100 Massachusetts Avenue, NW
Washington, DC 20008

Joint Service Command and Staff College
Library
Shrivenham
Swindon
Wiltshire, SN6 8LA
United Kingdom

CERTIFICATION FOR MMAS DISTRIBUTION STATEMENT

1. Certification Date: 6 June 2003

2. Thesis Author: MAJ Ronnie L. Coutts, U.K. Army

3. Thesis Title: Deep Maneuver: Past Lessons Identified for Future Bold Commanders

4. Thesis Committee Members:

Signatures:

5. Distribution Statement: See distribution statements A-X on reverse, then circle appropriate distribution statement letter code below:

(A) B C D E F X

SEE EXPLANATION OF CODES ON REVERSE

If your thesis does not fit into any of the above categories or is classified, you must coordinate with the classified section at CARL.

6. Justification: Justification is required for any distribution other than described in Distribution Statement A. All or part of a thesis may justify distribution limitation. See limitation justification statements 1-10 on reverse, then list, below, the statement(s) that applies (apply) to your thesis and corresponding chapters/sections and pages. Follow sample format shown below:

EXAMPLE

<u>Limitation Justification Statement</u>	<u>/</u>	<u>Chapter/Section</u>	<u>/</u>	<u>Page(s)</u>
Direct Military Support (10)	/	Chapter 3	/	12
Critical Technology (3)	/	Section 4	/	31
Administrative Operational Use (7)	/	Chapter 2	/	13-32

Fill in limitation justification for your thesis below:

<u>Limitation Justification Statement</u>	<u>/</u>	<u>Chapter/Section</u>	<u>/</u>	<u>Page(s)</u>
<hr/>	/	<hr/>	/	<hr/>
<hr/>	/	<hr/>	/	<hr/>
<hr/>	/	<hr/>	/	<hr/>
<hr/>	/	<hr/>	/	<hr/>
<hr/>	/	<hr/>	/	<hr/>

7. MMAS Thesis Author's Signature:

STATEMENT A: Approved for public release; distribution is unlimited. (Documents with this statement may be made available or sold to the general public and foreign nationals).

STATEMENT B: Distribution authorized to U.S. Government agencies only (insert reason and date ON REVERSE OF THIS FORM). Currently used reasons for imposing this statement include the following:

1. Foreign Government Information. Protection of foreign information.
2. Proprietary Information. Protection of proprietary information not owned by the U.S. Government.
3. Critical Technology. Protection and control of critical technology including technical data with potential military application.
4. Test and Evaluation. Protection of test and evaluation of commercial production or military hardware.
5. Contractor Performance Evaluation. Protection of information involving contractor performance evaluation.
6. Premature Dissemination. Protection of information involving systems or hardware from premature dissemination.
7. Administrative/Operational Use. Protection of information restricted to official use or for administrative or operational purposes.
8. Software Documentation. Protection of software documentation - release only in accordance with the provisions of DoD Instruction 7930.2.
9. Specific Authority. Protection of information required by a specific authority.
10. Direct Military Support. To protect export-controlled technical data of such military significance that release for purposes other than direct support of DoD-approved activities may jeopardize a U.S. military advantage.

STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors: (REASON AND DATE). Currently most used reasons are 1, 3, 7, 8, and 9 above.

STATEMENT D: Distribution authorized to DoD and U.S. DoD contractors only; (REASON AND DATE). Currently most reasons are 1, 3, 7, 8, and 9 above.

STATEMENT E: Distribution authorized to DoD only; (REASON AND DATE). Currently most used reasons are 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.

STATEMENT F: Further dissemination only as directed by (controlling DoD office and date), or higher DoD authority. Used when the DoD originator determines that information is subject to special dissemination limitation specified by paragraph 4-505, DoD 5200.1-R.

STATEMENT X: Distribution authorized to U.S. Government agencies and private individuals of enterprises eligible to obtain export-controlled technical data in accordance with DoD Directive 5230.25; (date). Controlling DoD office is (insert).